The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 1696.—Vol. XXXVIII. LONDON, SATURDAY, FEBRUARY 22, 1868. {STAMPED ....SIXPENCE. {UNSTAMPED..FIVEPENCE.

MR. JAMES CROFTS, STOCK AND SHAREBROKER,
No. 1, FINCH LANE, CORNHILL.
(Established 1842.)

IMPORTANT TO INVESTORS.

Several mines of great merit are attracting more than usual attention, and amongst them SUMMER HILL and WEST GODOLPHIN, the former situate at Mold, in Flintshire, in the small number of 508 shares, now paying dividends of THIRTY PER CENT. per annum on the present cost of the shares. WEST GODOLPHIN, Breage, Cornwall, in 5000 shares, has paid a first dividend, and the reports from the mine promising great success, the shares are in high favour. SPECIAL BUSINESS in both the above mines.

Copy of a report on ST. BRIDE'S SLATE QUARRIES, received by Mr. CROFTS, is inserted on p. 139. Business in these shares, which are estimated to pay, in the course of this year, a very large percentage on a small outlay. Mr. CROFTS has 400 shares, fully-paid to £2 per share.

*** Business in the Lucy Phillips Gold Mine shares.

*** Every description of STOCK EXCHANGE business transacted with promptitude at the customary Stock Exchange rates of commission.

Bankers: National Bank of Scotland, 37, Nicholas-lane, E.C. 1

MR. JOHN BUMPUS, 44, THREADNEEDLE STREET, has FOR SALE the following shares, free of commission :—

30 Bryn Gwiog, 21s.	15 Great Laxey, £18.	50 South Grenville, 6s 9d
50 Chontales, £3½.	Great So. Chiverton.	5 St. John del Rey. £17½
10 Chiverton, £3.	20 Gawton, £3.	25 South Darren, £2.
50 Carn Camborne, 4s.	35 Gt. So. Tolgus, 19s.	30 Wheal Crebor, 7s. 6d.
25 Drake Walls, 14s.	20 Marke Valley, £6½.	5 West Caradon, £10½.
50 Don Pedro, £2 17s.	50 New Quebrada, 8s 6d	30 Wheal Grenville, 28s.
50 East Carn Brea, £2.	15 North Crofty, £2 18s.	50 W. Drake Walls, 11s 9d
30 E. Grenville, 42s. 6d.	45 No. Treskerby, 28s. 6d	(call paid).
50 Frontino, 15s. 6d.	20 Prosper United, 30s.	50 W. Pr. of Wales, 10s.
30 Great Caradon, 2s.	35 Pr. of Wales, £57s. 3d	15 W. Wh. Kitty, 13s. 6d
10 Gt. Wh. Vor, £19¼.	30 Port Phillip, 30s.	20 West Godolphin, £2¼

FACTS WORTH NOTICING.

EAST CARADON, in 6144 shares, working at a monthly loss; market price, £4½, or for the mine £27,648
CLIFFORD, in 2880 shares, working at a monthly loss; market price, £6, or for the mine 17,280
Total £44,928
SOUTH DARREN, in 6000 shares, paying regular dividends; market price, £2 per share, or for the mine £12,000
EAST LOVELL, in 1906 shares, paying regular dividends; market price, £9, or for the mine 17,154
GAWTON COPPER, in 3950 shares, paying regular dividends; market price, £3, or for the mine 11,850
Total £41,004 2

Why will shareholders continue to adhere and advise clients to invest in poor or deep unprofitable mines because they happen to have been market favourites at one time, and forget good substantial dividend mines?

Shareholders wishing to exchange in the above will do well to apply to me.

GUIDE TO INVESTORS.—MR. LELEAN'S STOCK, SHARE, AND FINANCE REGISTER for February, contains a comprehensive review of the Stock and Share Markets of the past year; a list of all the dividends paid in January; a selection of Investments paying 10 to 16 per cent.; and such information as is necessary to guide intending investors. —6d. per copy, or 5s. annually, post free.
Published by Mr. BAKER LELEAN, at his offices, 11, Royal Exchange, London. 3

MR. WILLIAM WARD,
STOCK AND SHAREDEALER,
No. 29, THREADNEEDLE STREET, LONDON, E.C. 4

MR. JOHN BATTERS, STOCK AND MINING SHAREBROKER, 13, THROGMORTON STREET, LONDON, E.C. 5

MR. WILLIAM SEWARD, STOCK AND MINING SHARE BROKER, 19, THROGMORTON STREET, LONDON, E.C.
Every description of shares BOUGHT and SOLD at the best market prices. 6

MR. THOMAS SPARGO, STOCK AND SHAREDEALER, 224 & 225, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C. 7

MR. EDWARD BREWIS, PALMERSTON BUILDINGS, 34, OLD BROAD STREET, LONDON, E.C., has FOR SALE, free of commission :—15 Anglo-Brazilian, ½; 20 Cashwell, ¾; 10 Chontales, 2¾; 10 Don Pedro, 2½; 25 Frontino, 17s.; 5 Gawton, 2⅝; 5 Great Vor, 19½; 15 Great Laxey, 18; 15 Lucy Phillips, 6; 50 Mining Association, ⅝; 20 North Crofty, 2¾; 20 Hollybrush Colliery; 30 Prince of Wales, 2¾; 20 South Condurrow, ½; 10 Summer Hill, 10¼; 15 Rhosesmor, 4⅞; 25 Westminster (offers wanted); 10 Macs-y-Safn, 28½; 30 West Godolphin, 1½; 1 Wheal Seton, 85; 5 Roseclifte and Tolcarne, 9½; 50 East Bottle Hill, 3s. 6d.; 2 Buller, 18; 5 Mount Pleasant, 6; 50 Rhydtalog (offers wanted); 20 Central Snailbeach, 18s. 6d.; 10 Yudanamutana, 1½; 50 Chontales Royalty (offers wanted); West Drake Walls, 11s. 3d.
N.B.—Many of the above shares can be subdivided, to suit the convenience of purchasers. 8

MR. J. B. REYNOLDS, 70 and 71, BISHOPSGATE STREET WITHIN, LONDON, E.C.
Bankers: City Bank.
Feb. 21, 1868. Established Eleven years. 9

CAPTAIN JAMES POPE, on WEST ST. IVES MINE.—A copy of a report on West St. Ives Mine, by Capt. James Pope, dated February 1, 1868, can be had on payment of 2s. 6d.
Apply to Mr. J. B. REYNOLDS, Nos. 70 and 71, Bishopsgate-street Within, London, E.C.
Remittances from the country may be made in postage stamps. 10

MESSRS. POWELL AND MOSS, SHAREDEALERS, 78, OLD BROAD STREET, LONDON, E.C., and Mining Exchange, have large transactions in Prince of Wales, North Treskerby, Frontino, North Crofty, Chiverton, Chiverton Moor, and West Chiverton. Parties dealt with at a fair margin on the market price.
References exchanged.
Bankers: City Bank, Finch Lane. 11

JOHN RISLEY, STOCK AND SHAREBROKER
(SWORN BROKER),
48, THREADNEEDLE STREET, LONDON, E.C.
SPECIAL ARRANGEMENTS as to commission on large transactions. 12
Agents' reports from Grenville, Retallack, Prince of Wales, and other mines forwarded to clients on the same day as received in London.

MR. WILLIAM MARLBOROUGH, 1, GREAT ST. HELEN'S, BISHOPSGATE STREET, LONDON, E.C. (Established 13 years), has FOR SALE the FOLLOWING SHARES, at nett prices :—

50 Anglo-Brazil., 9s. 6d	50 Frontino, 15s. 6d.	10 Summer Hill, £10½.
20 Chiverton, £2 18s. 9d.	10 Gt. No. Downs, £4 6 3	5 Tincroft, £14¼.
2 Carn Brea, £23¼.	30 Gt. Retallack, £2 16 3	5 West Caradon, £10 1 9
40 Chontales, £1¾ dis.	2 Gt. Wh. Vor, £19¾.	50 W. Drake Walls, 10s 9d
15 Chiver. Moor, £5 18s 9	20 Gt. So. Tolgus, 18s 6d	2 W. Chiverton, £66½.
5 Clifford, £5 18s.	20 No. Treskerby, 27s 3d	15 W. Great Work, £3 3 9
25 Don Pedro, £2½ pm.	15 North Crofty, £2⅞.	50 W. Godolphin, £2½.
4 East Basset, £103¼.	20 Port Phillip, £1 10 6	30 W. Pr. of Wales, 9s 3d
10 E. Caradon, £4 16 3	25 Prince of Wales, 56s.	20 Wh. Grenville, 27s 3d
20 East Russell, 24s. 6d.	2 Providence, £27 18s 9	40 Wheal Crebor, 4s. 9d.
20 E. Carn Brea, £2½.	20 South Darren, 36s. 3d	3 Wh. Mary Ann, £21½
30 East Rosewarne, 6s 9	50 So. Condurrow, 12s.	1 Wheal Seton, £84½
20 East Grenville, 34s 9d	4 St. Johndel Rey, £15½	1 Wheal Buller, £1
5 East Lovell, £8 8s. 9d	1 South Frances, £23⅛	5 Westminster, £5⅛.

MR. GEORGE BUDGE, STOCK AND SHAREDEALER, No. 4, ROYAL EXCHANGE BUILDINGS, LONDON, E.C. (Established 19 years), has FOR SALE at nett prices :—150 West St. Ives, 6s. 9d.; 10 Macs-y-Safn, £28⅞; 50 Frank Mills; 40 Rosewarne United; 50 East Rosewarne, 10s.; 25 Great North Laxey, 17s.; 80 Crebor, 6s. 3d.; 150 Redmoor, 3s. 3d.; 10 Summer Hill, £11; 5 Rose and Chiverton; 35 Colquite and Callington, £1 19s.; 1 Devon Great Consols; 100 Anglo-Brazilian, 11s.; 30 West Wheal Kitty, 12s. 9d.; 5 West Caradon; 50 Caldbeck Fells, 9s. 3d.; 20 Wheal Kitty (St. Agnes), £2¼ ex div.; 20 Old Westminster, £5½; 20 Westminster, £4¾; 25 Great South Tolgus; 50 West Drake Walls, 11s.; 30 Wheal Grenville; 20 Don Pedro; 50 Cape Copper; 25 South Herodsfoot, £2¼; 10 Camborne Vean, 15s.; 1 Minera; 50 Great South Chiverton, 15s.; 50 Maudlin, 25s. 3d.; 70 Okel Tor, 15s. 6d.; 20 East Grenville; 45 West Prince of Wales. 14

CORNISH AND DEVON MINES.—
ANNUAL REVIEW for the YEAR 1867.

Botallack.	Herodsfoot.	Tincroft.
Cargoll.	Marke Valley.	Trumpet Consols.
Carn Brea.	New Wheal Seton.	West Basset.
Chiverton.	North Downs.	West Caradon.
Chiverton Moor.	North Levant.	West Chiverton.
Cook's Kitchen.	North Treskerby.	West Drake Walls.
Devon Great Consols.	North Wh. Chiverton.	West Great Work.
Drake Walls.	North Wheal Crofty.	West Wheal Frances.
East Basset.	Prince of Wales.	West Wheal Seton.
East Caradon.	Prosper United.	Wheal Agar.
East Carn Brea.	Providence.	Wheal Basset.
East Providence.	South Basset.	Wheal Buller.
East Rosewarne.	South Caradon.	Wheal Grenville.
East Wheal Grenville.	South Wheal Frances.	Wheal Margaret.
East Wheal Lovell.	Spearn Moor.	Wheal Margery.
Gram. & St. Aubyn.	Stray Park.	Wheal Mary Ann.
Great South Tolgus.	Trelyon Consols.	Wheal Seton.
Great Wheal Vor.	Tresavean and Trethurup.	Wheal Trelawny.
Great Work.		Wheal Uny. 15

PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST," for JANUARY and FEBRUARY, contains the usual ANNUAL REVIEW on the above mines. Important remarks are made as to the Past, Present, and Future of the above, with advice as to purchase or sale, &c. Shareholders and others will do well to peruse the Statistical information thus afforded previous to BUYING or SELLING.

CORNWALL AND DEVON MINES.—
FOREIGN GOLD MINES, &c.
PETER WATSON'S "WEEKLY MINING CIRCULAR AND SHARE LIST—SYNOPSIS OF CORNISH AND DEVON MINES," of Friday, Feb. 21, No. 467, Vol. X., price 6d. each copy, forwarded on application, contains information on the following mines :—

Prince of Wales.	Tincroft.	Don Pedro No. del Rey.
North Wheal Crofty.	Botallack.	Anglo-Brazilian.
East Wheal Lovell.	North Wheal Chiverton	English and Australian
West Caradon.	Clifford.	Copper.
	St. John del Rey.	United Australian. 16

With Remarks on the Tin and Copper Trade, Advance in Copper Standard, &c.

THE LONDON DAILY RECORD—STOCK AND SHARE LIST—STOCK EXCHANGE SECURITIES. Published every evening at 5 o'clock. It contains the latest prices of railways, banks, mines, foreign stocks and bonds, financial, insurance, and miscellaneous shares, remarks on the daily rise and fall in prices, with advice as to purchase and sales. Annual subscription, £1 1s.; by post, £2 5s.; monthly subscription—by post, 4s.; single copy, 1d.; by post, 2d.
PETER WATSON, Stock and Sharedealer, 79, Old Broad-street, London. 17

MR. EDWARD COOKE, STOCK AND SHAREDEALER, 76, OLD BROAD STREET, LONDON, E.C.
The following mines dealt in at close market prices :—East Lovell, Great Wheal Vor, Prince of Wales, West Drake Walls, West Caradon, North Wheal Chiverton, Carn Brea, Frank Mills, Caldbeck Fells, North Treskerby, New Wheal Lovell, West Chiverton, Trelawny, West Kitty, East Carn Brea, Wheal Seton, North Downs, Clifford Amalgamated, and Trumpet Consols.
BUYERS or SELLERS of the above will find it to their advantage to apply to Mr. COOKE.
Mr. COOKE is a BUYER of any number of West Drake Walls and New Lovell.
A lithographic plan and report of New Wheal Lovell sent free on application.
N.B.—A Daily Price List on application.
Satisfactory references given in any town in the United Kingdom. 18
Bankers: Alliance Bank.

MR. W. H. CUELL
(late of the firm of WATSON and CUELL),
Has REMOVED TO 42, CORNHILL, LONDON, E.C. 19

GEORGE RICE, STOCK AND SHAREDEALER, 78, OLD BROAD STREET, LONDON, E.C. (Member of the Mining Exchange), (25 years' experience), TRANSACTS BUSINESS in MINING SHARES, at close prices. Money advanced on mining shares.
Feb. 21, 1868. Bankers: Bank of England. 20

MR. THOMAS THOMPSON, MINING OFFICES, 12, OLD JEWRY CHAMBERS, LONDON, E.C.
There is a great improvement at Ebury Mine, the lode in the shaft being worth 2 tons ot lead ore to the fathom. There can be no doubt whatever now that this will be a rich and early dividend mine. The shares should be purchased at the present low price; as also Westminster, Central Snailbeach, and East Snailbeach.

JOHN WILLIAM HUTCHINSON,
is a SELLER of the following SHARES at nett prices :—

5 Clifford, £5⅞.	20 East Rosewarne, 7s.	25 N. Treskerby, £1 7 9
10 Chiverton, £3 1s. 3d.	10 E. Carn Brea, £2 1 3	20 Prince of Wales, £2 17
10 Chiverton Moor, £5⅞	25 Frontino, 13s. 9d.	5 Summer Hill, £11 15s.
25 Chontales, £2 16s. 3d.	20 Gt. Retallack, £2 16 3	5 St. John del Rey, £17
20 Don Pedro, £2 pm.	10 Great So. Tolgus, £18	5 Trelawny, £6 15s.
20 Drake Walls, 12s. 6d.	5 Macs-y-Safn, £28¾.	20 Wh. Grenville, £1 7 6
25 East Grenville, £1 12 6	10 North Crofty, £2 17s.	25 W Pr. of Wales, 9s 6d

SHARES WANTED :—Cargoll, Marke Valley, Wheal Emily, West Frances, Wheal Kitty (Lelant), Wheal Mary Ann, &c.
Sellers state lowest price cash. 22
OFFICES—31, THROGMORTON STREET, LONDON, E.C.

Established Fourteen Years.

MESSRS. WARD AND JACKMAN,
SHAREDEALERS,
CUSHION COURT, OLD BROAD STREET, CITY, E.C.
Members of the Mining Exchange, London.
Closing prices, Friday Evening, February 21 :—

Anglo-Brazilian	£ ⅜	to £ ½	Prince of Wales	56s	to 58s 6d
Carn Brea	22 „	24	Providence	£ 27	„ £ 28
Chontales	2¾ „	3	South Basset	7½ „	10
Chiverton Moor	5⅜ „	6	South Wh. Frances	22½ „	23½
Clifford Amalgamated	5⅜ „	5⅞	St. John del Rey	16 „	18
Cook's Kitchen	9 „	10	Tincroft	14 „	14½
Don Pedro (pm.)	21 „	21¼	West Chiverton	65 „	67
East Caradon	4⅜ „	5	West Caradon	9¾ „	10¼
East Lovell	8¼ „	8¾	West Drake Walls	10s. „	12s
East Wheal Russell	25s „	30s	West Great Work	3 „	3¼
Frontino and Bolivia	15s 6d „	16s. 6d	West Prince of Wales	9s. „	11s.
Great Laxey	17 „	18	West Wheal Seton	190 „	200
Great North Downs	4 „	4½	Wheal Basset	65 „	70
Great Retallack	2¾ „	3	Wheal Buller	17 „	19
Great Wheal Vor	19 „	20	Wheal Grenville	27s 6d „	30s.
Marke Valley	6⅜ „	6⅝	Wheal Mary Ann	20½ „	21½
North Treskerby	26s 6d „	28s 6d	Wheal Seton	82½ „	85
North Wheal Crofty	2¾ „	2⅞	Wheal Trelawny	7 „	8

Messrs. WARD and JACKMAN are DEALERS in all the above at the close market price of the day.
Messrs. WARD and JACKMAN will forward a correct list of closing prices and statistical information GRATUITOUSLY on application.
Messrs. WARD and JACKMAN beg to refer to their remarks on p. 139. 23
Feb. 21. Bankers: London and Westminster, Lothbury.

MR G. D. SANDY, STOCK AND SHAREDEALER, No. 48, THREADNEEDLE STREET, LONDON, E.C., TRANSACTS BUSINESS in EVERY DESCRIPTION of STOCK EXCHANGE SECURITIES, MINING and FINANCIAL ENTERPRISES, at close market prices.
TAMAR VALLEY.—My advice is buy these shares while they are to be had at a low figure. All those who are sceptical as to the prospects of this property will do well to consult G. D. SANDY, who has lately visited the mine and had it inspected by competent judges.
MONTGOMERYSHIRE LEAD AND BARYTES COMPANY (Limited).—Full particulars of this valuable property on application. 24

INVESTMENT, LOAN, AND BANK AGENCY.
Established 1839.
PUBLIC SECURITIES of every description bought and sold upon advantageous terms.
LOANS granted, for one year or any shorter period, on Stocks and Shares having a market value.
FIVE PER CENT. INTEREST allowed upon DEPOSITS of all amounts withdrawable at one month's notice.
Bank and Finance Agency Business generally undertaken.
RICHARD TAYLOR AND COMPANY,
No. 12, Clement's-lane, Lombard-street, London, E.C. 25

MR. CHARLES THOMAS,
MINING AGENT, GENERAL SHAREDEALER, AND AUCTIONEER,
3, GREAT ST. HELEN'S, LONDON, E.C. 26

Second Edition, price One Shilling; post-free, fourteen stamps,
MINING FIELDS OF THE WEST:
A PRACTICAL EXPOSITION OF THE
PRINCIPAL MINES and MINING DISTRICTS of CORNWALL and DEVON.
Published by CHARLES THOMAS,
At No. 3, Great St. Helen's, London, E.C. 27

MESSRS. LANE AND GIBBS, 2, ROYAL EXCHANGE, LONDON, E.C. (Members of the Mining Exchange), STOCK AND SHAREDEALERS, transact business in all kinds of securities at closest nett prices for cash or account.
SPECIAL BUSINESS in Marke Valley, Great Laxey, Great North Laxey, Don Pedro, and Tin Hill. Daily price list on application.
Bankers: London and County Bank. 28

SHARP'S GUIDE TO INVESTORS.—
SHARP'S GUIDE TO TRUSTEES.
SHARP'S GUIDE TO SHAREHOLDERS.
Dividends 10 to 20 per cent. per annum on present outlay.
For reliable information and safe investments, paying good dividends,
Consult SHARP'S INVESTMENT CIRCULAR,
GRANVILLE SHARP and Co., Stock and Sharedealers, 32, Poultry, London, E.C.
Circular, 6d. per copy; annual subscription, 5s.] [Established 1852. 29

MATTHEW GREENE, STOCK AND SHAREDEALER,
1, ST. MICHAEL'S HOUSE, CORNHILL, LONDON, E.C.
TAMAR VALLEY.—I still advise the purchase of these shares. The report of the agent in this day's Journal will sufficiently justify my recommendation.
MONTGOMERYSHIRE LEAD AND BARYTES (Limited).—M. G. is a BUYER of these shares at £2½. 30
NEW CLIFFORD MINE is looking well; these shares should certainly be bought.
LOVELL CONSOLS.—This mine is well situated, and the prospects most encouraging. I look upon this mine as an eligible speculation.
"Full particulars of the mines mentioned above on application."

MR. HENRY MANSELL,
STOCK AND SHAREDEALER.
No. 44, THREADNEEDLE STREET, LONDON, E.C.
References Exchanged.—Member of the Mining Exchange.
Bankers: London Joint-Stock Bank. 31

MR. E. J. BARTLETT, STOCK AND SHAREDEALER,
30, GREAT ST. HELEN'S, E.C. 32

BARTLETT AND CHAPMAN, STOCK AND SHAREDEALERS, 2, BUCKLERSBURY, LONDON, E.C.
Business transacted in every description of securities at closest market prices, free of commission.
GREAT SOUTH CHIVERTON continues to improve, and shares should be secured at once.
LOVELL CONSOLS.—The lode in the shaft still holds good, and is worth 12l. per fathom. This is the cheapest property we can direct attention to, and no time should be lost in purchasing.
TAMAR VALLEY.—The lode in the 10 and 20 fm. levels is improved since last week, and, from the indications, a good paying lode may soon be expected.
GOLD MINES.—Great caution should be exercised before investing money in this class of security. While home mines pay from 10 to 20 per cent., we are at a loss to understand the motive for sending capital away from England, to end in loss of capital and disappointment of dividend.
Our "Investment Circular and Financial Record," forwarded post free on application, and should be consulted by all who wish to invest their capital without risk, with a certainty of good dividends.
Bankers: London and Westminster Bank. 33

CHONTALES GOLD COMPANY.—FULL PARTICULARS of the DIFFERENT CLASSES of SHARES can be obtained on application to Mr. J. H. MURCHISON, No. 8, Austinfriars, E.C. 34

MR. T. ROSEWARNE, 81, OLD BROAD STREET, LONDON, has BUSINESS in the following shares for cash or time on :—

Bedford Consols.	East Carn Brea.	Prince of Wales.
Bedford United.	East Lovell.	Rhydtalog.
Chiverton Moor.	East Russell.	Rossa Grande.
Chontales.	Frontino and Bolivia.	St. John del Rey.
Clifford.	Gawton.	West Caradon.
Devon Consols.	Marke Valley.	West Drake Walls.
Don Pedro.	North Crofty.	West Prince of Wales.
Drake Walls.	North Treskerby.	Wheal Agar.
East Caradon.	Okel Tor.	Wheal Seton.
	Old Gunnislake.	

PRINCE OF WALES.—From my agent's report this week I find the lode is cut at the 65, and, I am sorry to say, of no value. I am a SELLER of these shares for time on, below the present market prices; those who took my advice, and sold at 65s. and 70s., have done well. I still recommend the immediate sale of these shares, as they must go considerably lower. Present price, 56s. 58s.
T. R. can recommend three mines safe for a great rise within the next four months. 35
Money advanced on good mining shares. Office hours from 10 to 4.
Bankers: Bank of England.

MESSRS. J. TAYLOR AND CO., FINANCIAL, MINING, AND GENERAL AGENTS, 17, CROSS STREET, MANCHESTER, have the following SHARES FOR SALE :—

10 Great Wh. Vor, £20½	5 Clifford.	50 Great Mona (second
100 Penhale United, 10s.	10 Great North Laxey.	issue).

J. T. and Co. recommend the immediate purchase of Great Mona. 36

JAMES SCOTT AND CO., STOCK AND SHAREDEALERS, 1, PINNER'S COURT, OLD BROAD STREET, LONDON, E.C.
J. S. and Co. are SELLERS, for cash or the account, of shares in any of the undermentioned mines, at quoted prices :—

Anglo-Brazilian, 10s. 3d.	Marke Valley, £6 7s. 6d.	Stray Park, £3 5s.
Bedford Consols, £1.	North Downs, £1 3s. 6d.	Summer Hill, £11.
Chontales, £2 15s.	North Treskerby, 28s. 6d.	Tincroft, £14 2s. 6d.
Chiverton Moor, £5⅞.	North Crofty, £2 17s. 6d.	West Basset, £2.
Clifford Amal., £5 17s. 6d	Okel Tor, £1.	West Chiverton, £67.
Drake Walls, 12s. 6d.	Providence, £27 10s.	West Caradon, £10.
Don Pedro, £2 16s. 6d.	Port Phillip, £1 16s. 3d.	West Drake Walls, 11s 3d.
East Carn Brea, £2½.	Prosper United, £1 10s.	W. Prince of Wales, 10s 6d
East Russell, £1 7s. 6d.	Prince of Wales, £2 16s.	West Wheal Seton, £192.
East Caradon, £4 15s.	Rossa Grande, 11s. 3d.	Wheal Basset, £68.
East Lovell, £8 10s.	Rhydtalog, 11s.	Wheal Buller, £17.
Frontino, 14s. 6d.	South Darren, £1 15s.	Wheal Emily, £2 11s. 3d.
Gawton, £3.	St. John del Rey, £17 10s	Wheal Grenville, £1 8s.
Gt. South Tolgus, 17s. 6d.	South Basset, £8 10s.	Wheal Mary Ann, £21 5s.
Gt. Wheal Vor, £19 10s.	South Grenville, 6s.	Wheal Seton, £84.
	South Frances, £22 10s.	

J. S. and Co. are in a position to carry over from account to account any reasonable amount of mine stock at the low rate of 5 per cent. per annum, provided it be paid down within 25 per cent. of the current market value.
J. S. and Co. having in their employ several of the most experienced and trustworthy mine agents in the United Kingdom, who periodically inspect on their behalf all the *bona fide* mines in Devon, Cornwall, and Wales, are enable to accord to their friends and clients reliable advice as to the present and future prospects of all mines they deem worthy the attention of capitalists and investors.
References will be given to the Alliance Bank and the Bank of England.
RHYDTALOG SILVER-LEAD MINE (CARDIGAN).—J. S. and Co. recommend the immediate purchase of these shares at present low prices (9s. to 11s.) Several parcels of rich silver-lead ore have already been sold at very high prices, and the mine is daily becoming of largely increased value. From personal inspection, and private knowledge of the intrinsic merits of this property, J. S. and Co. have no hesitation in recommending it to their clients as a first-class investment. 37

MR. THOMAS THOMAS,
ASSAYER, &c.,
COPPER ORE WHARVES, SWANSEA. 38

MR. JAMES STOCKER,
PALMERSTON BUILDINGS, OLD BROAD STREET, and MINING EXCHANGE, LONDON, E.C., STOCK AND SHAREDEALER in all kinds of Stock Exchange and Mining Securities.
Established Twenty Years.
Money promptly advanced on shares.
Bankers: London and Westminster, Lothbury 39

Original Correspondence.

THE IRON TRADE—ENGLISH AND FOREIGN.

MR. PLIMSOLL'S LETTERS.

SIR,—It has occurred to me that you might like to know what are the views of the Iron Trade upon Mr. Plimsoll's letters to the *Times*, of which you gave an excellent *resume* in the Supplement to last week's Journal. Those views are that the correspondence contains a great amount of unscreened information, not always perspicuously set down, and tending not only to very little practical good, but calculated also to mislead. It is much to be regretted that Mr. Plimsoll did not visit those parts of our country where, perhaps, more progress is displayed in the pig-iron department of the trade than is seen in the districts to which he was able to give his attention.

It is further to be regretted that Mr. Plimsoll is not, as we presume, an ironmaster. The state of the iron manufacture of Great Britain has not, in consequence, been accurately represented; whilst undue importance has been attached to the operations of certain of our continental rivals. The professional status of the British ironmaster has thereby been misrepresented to those readers of the *Times*, both here and abroad, who have perused Mr. Plimsoll's letters. Processes which are recommended to the adoption of the British ironmaster, because they are successfully practised in Belgium, are some of them altogether impracticable in this country, and others have long ago been rejected here. In scarcely any branch of manufacture has more progress been made in England in modern times than in the production of pig-iron —that process to which Mr. Plimsoll has chiefly directed his attention. By our experience and inventions the continental ironmasters have been benefited, for they have not failed to avail themselves of as many improvements as their circumstances would allow of. Mr. Plimsoll said that he went out to the Continent to ascertain "How better to do it," and with "a tolerably earnest desire to benefit others." We have not the slightest doubt he was moved by these motives, but we question if either object has been obtained. If he had been a practical ironmaster, and had gone to South Wales before he went to Belgium, he would probably have learnt that in the Southern Principality they have a method of making coke inside brick walls, with an open top, by which a better yield can be got than by the costly machinery which Mr. Plimsoll found in use upon the Continent, and which he so warmly recommends; whilst further enquiries into this coking question in the North of England would have shown him that at the same time that an oven there produced very satisfactory results when charged with the coal of that district, still when it was supplied with Staffordshire coal the mineral was altogether consumed. Ironmasters do not think that in the matter of coking Mr. Plimsoll has, by his journey to the Continent, ascertained "How better to do it."

Nor do they believe that his investigations have been any more successful in respect of the best method of charging the furnaces. They have been greatly amused at the description of a filler being careful; that two pieces of coke, each the size of a potato, should have between them a piece of ironstone of the size of an orange, "to give each of them something useful to do." Such an incident might possibly have been witnessed in this country "long, long ago," but we are happy to say that the sight would now be almost as rare as to see the process of reducing the ore by means of the early air bloomeries, which erected on high grounds, in order that the wind might assist combustion, were fed, probably out of baskets, with small pieces of ore and charcoal, placed over the fire in successive layers. Our experiments in this country have taught us that the best and most economical results can be obtained from huge tower-like furnaces, supplied with large but, as far as possible, uniform pieces of materials. With the use of these there is less impediment to the blast, the furnace is not so readily choked, and there is a better yield than would be possible if the small pieces of material, which were necessary when the furnaces were of the Lilliputian class, were shot in. Ironmasters do not think that in the matter of filling Mr. Plimsoll has learnt "How better to do it" by his visit to the Continent.

Again, they do not think that his "tolerably earnest desire to benefit others" has been attended with much practical success. If an attempt should be made to cover in the British furnaces after the fashion of the Continent, it would not be long before so many fillers would fall victims to the humane (?) practice, that coroners and juries would soon put an end to the plan. Mr. Plimsoll will, perhaps, be surprised to know that in years long past the *petit* blast-furnaces, worked with cold air and charcoal, were covered over as he recommends, but that this covering, like the potato and orange-sized materials, have long since disappeared.

Perhaps it will also be new to him to know that the other suggestion, likewise made in the interest of the workman, was at one time in practical operation in this country, but that it, too, was swept away before the giant proportions which the iron industry of Great Britain has now assumed; and that even before those proportions had been attained the men themselves in many instances insisted upon the abandonment of the roofs. From a few tons at a cast, the emptying of a plant of furnaces has now risen in some instances up to 100 tons, which finds its way over a vast space of sand in only a few minutes. Mr. Plimsoll recommends operative ironmakers on the Continent to come to England, and show us "how better to do it." The British pig-master would recommend Mr. Plimsoll to start in the pig-making line, erect a plant to turn out 100 tons at a tap, and cover over his casting ground with a roof. We can promise him that the fits of rheumatism and ague which his men would suffer by reason of the roof in such a climate as ours would soon satisfy him that in putting up a roof he had not been able to accomplish his "tolerably earnest desire to benefit others." The men of the present day would, as did those of past generations, demand that the roofing should be taken down, and the huts now usually devoted to every set of casters substituted. In the last place, much as Mr. Plimsoll may think of his suggestion of an annual competition in the prize scheme way, the ironmasters do not believe in it. Their experience has taught them that the most valuable workman is he who can be depended upon to produce a fair average yield the year round, and not the man who upon special occasions can do a lot of work quickly and well. These two classes of puddlers, for instance, are to be found in every forge, and the success of a workman in the contest for a prize would by no means establish his average worth.

The ironmasters cannot but appreciate the motives of gentlemen who make public the result of their enquiries into the methods of conducting their industry in Great Britain and upon the Continent, but it is their desire that when this duty is undertaken it should be done by men who are able, by reason of their own knowledge of the trade, to appreciate the value or worthlessness of the information supplied to them, so that when they lay open the contents of their note-book before the world, the iron trade of this country may not have to be viewed through the thick London fog which Mr. Plimsoll's letters have thrown around it. SOUTH STAFFORDSHIRE.

MR. I. L. BELL AND MR. S. PLIMSOLL'S LETTERS ON THE IRON TRADE.

SIR,—Within the last week or two, four letters on the iron trade, bearing the signature of Samuel Plimsoll, have appeared in the most conspicuous print of the *Times* newspaper. You have in your columns drawn attention to these letters, and you mention its having been formerly stated that before a British ironmaster can effectually meet foreign competitors the remuneration of British labour must be reduced. You also suggest that a saving in the fuel consumed in our blast-furnaces might enable the British ironmaster to avoid the unpleasant contingency of reducing his price of labour to the level of that paid abroad. It is quite true Mr. Plimsoll adopts the not uncommon opinion of the day, that foreign ironmasters are more expert than we are in economising fuel in the blast-furnaces; and he has visited France and Belgium with the object of satisfying himself on this point. I only trust he may bring to the consideration of this important subject sufficient experience to determine a question measured, not solely by so many hundredweights of coke or coal to the ton of iron, but by other circumstances connected with the nature of the fuel employed, the ores under treatment, and the quality of the iron sought to be obtained. If I entertain any doubt on this head, it is inspired by the fact that, in order to fortify his experience, Mr. Plimsoll had, previously to the commencement of his journey abroad, to visit the ironworks of Yorkshire, Lancashire, and Staffordshire. As the result of this preliminary step he makes a few general observations, in which he omits most of the really important circumstances affecting the question under discussion.

We are informed by this gentleman that "a smattering of chemistry may not be amiss" to the iron smelter, and he then proceeds to "judge" that the coal used near London, for burning clay into ballast, is only one-third of the quantity of that employed by the furnaceman to calcine his ironstone; and he infers that this is an unnecessary waste, on the ground that "it can scarcely take more fuel to make red-hot a piece of ironstone than to make red-hot a piece of clay." It would be as reasonable for the plumber to blame the ironfounder for using more fuel to melt his pig-iron than he himself requires for fusing his lead. In the case of clay only 2 to 5 per cent. of water has to be expelled, which is easily accomplished at a low red heat, while in the case of ironstone nearly 25 per cent. of carbonic acid gas has to be dissipated—an operation which not only demands a much higher temperature, but also requires the action of the heat to be continued for a considerable time. The reasons for this are readily understood by anyone who has studied the great absorption and loss of heat during the generation of gaseous substances. Again, Mr. Plimsoll throws some doubt on the real value of one of the great improvements of recent days, connected with the blast-furnace—the use of the gases which were previously consumed, all but unprofitably, at the furnace head. He fears the steam may convert the sulphurous into sulphuric acid, and this being condensed will destroy the iron tubing employed for conveying the gases to the boilers. Mr. Plimsoll should have remembered that the mere contact of steam with sulphurous acid is incapable of producing the results he mentions; and, were it otherwise, he has overlooked the fact that the tubes at the works he has visited are filled with gases heated far above the temperature at which sulphuric acid is condensed. Besides, we have the fact that the system has been in operation for nearly 20 years; and I have never yet heard of the tubing at any furnaces having to be renewed. Those at the Clarence Works are, so far as acid corrosion is concerned, as sound as they were when erected 15 years ago.

I shall not trespass upon your space in following Mr. Plimsoll through his description of the Barrow Works, his views on the puddling process, and his suggestions for improving Siemens' furnace. I shall content myself with observing that the errors he falls into indicate, it is to be feared, a want of previous practical acquaintance with his subject, and that the chemistry he propounds will scarcely secure confirmation at the hands of any man conversant with that science.

Most of your readers are aware that for many years Scotland stood first in the list as a cheap pig-iron making district, and that the only rival she now acknowledges is Middlesborough and its neighbourhood. Less than 18 years have sufficed to raise the last-mentioned locality to a power of production equal to one-fourth of the previous make of the United Kingdom; and the blast-furnaces and forges there having been all built within that period, comprise, it is universally admitted, probably every known improvement in the art of smelting and working iron. Mr. Plimsoll not having had time to visit either Scotland or Middlesborough, finds himself compelled to exclude both from any comparison by which he proposes to exhibit the relative state of perfection attained by iron manufacturers here and abroad.

In a succeeding communication I shall, with your permission, endeavour to demonstrate how far his views are to be relied on when he deals with information obtained at establishments which he has visited. I. LOWTHIAN BELL.

Washington, Durham, Feb. 15.

[We have been requested to publish the foregoing letter, which was addressed by Mr. Bell to the *Newcastle Daily Chronicle*.]

THE TRUCK SYSTEM IN WALES.

WHY TRUCK IN WALES WAS NOT MENTIONED IN THE REPORT OF THE SELECT COMMITTEE OF THE HOUSE OF COMMONS ON MINES, 1867?

SIR,—One of your correspondents in last week's Journal puts the question, Why Wales was left out of the Committee's Report of last Session? The cause is briefly this: during the last 15 years all the efforts that the miners of Scotland and England have made to obtain legislative redress to the grievances of which they complain, the Welsh miners have stood aloof. They have contented themselves with sending begging petitions to their employers, of the character your correspondent gives. The result has been that the efforts of others to destroy the monster Truck have been killed, to a certain extent, by the very men that are large in these begging petitions.

The Welsh miners ought to know this much—that where the large profits that your correspondent names are made from truck it will be very difficult to make the recipients of such to give it over.

That all should be compelled to abandon it is clear on two grounds —1. It has a demoralising effect on those who have to submit to it.—2. While it is continued by some and not by others it enables those that practice it to outsell the non-truck master in the common markets.

British Coffee-house, Strand. ALEX. MCDONALD,
President Miners' National Association.

THE "POUNDAGE" SYSTEM IN SCOTLAND.

SIR,—Your correspondent, "Mentor," while writing against the Truck System, should have mentioned another, and a far greater, grievance, called in Scotland, where it exists, "poundage." What is poundage? When wages are paid fortnightly, and there are no stores, and the improvident collier can get no credit, he goes to his master and borrows money on account of the work he has done, and the master charges him *a shilling to the pound, and sometimes a penny to the shilling*, for all moneys so advanced during the fortnight—that is poundage. In some cases the money is advanced daily, and in others three days a week; but the rate of interest is always the same. I might expose the unfairness of this charge by showing that if the collier has a loan for 13 days the interest charged, at the rate of 5 per cent., is at the rate of 140 per cent. per annum; or if he has a loan but for one day it is at the rate of 1825 per cent. per annum. Just think of that ye magnates who are lending your money at 2 per cent. per annum; and on undoubted security to, for the money is worked for, and there is no risk. I say I might effectively illustrate the obnoxious system in this way, but, instead of doing so, shall take the really practical way in which it works. A colliery paying 400*l.* in wages for a fortnight will "cash" 200*l.*, or nearly a half, and, of course, as the money is not advanced until it is worked for it lies idle during the fortnight, until it is asked for, so that practically it is really 5 per cent. per fortnight, or the 200*l.* makes 260*l.* per annum. In some collieries, however, the interest taken is a penny to the shilling, in which case the 200*l.* makes $200 \times \frac{20}{12} \times 26 = 433l.$ 6s. 8d. In other cases, where the 5 per cent. is professedly charged, 6d. is charged for any sum under 10s. and above 5s., 9d. for 15s., 1s. for 20s. or above 15s.

I have no wish to overstate the matter, or I might put in many adjuncts to show that in some hands it becomes even more oppressive than I have stated. If anyone thinks the account overcharged let him correct me. The system is confined to Lanarkshire, and it is satisfactory to know that the more advanced of the coalmaster are feeling ashamed of it. The demoralising effects upon the wives and children of the miners are apparent. ONE WHO KNOWS.

WORKING DOUBLE-SHIFTS IN FIERY COLLIERIES.

SIR,—The efforts of Mr. Foster, Mr. Nixon, and others, to show that the working of double-shifts in collieries which are known to contain accumulation of gas, as a means of lessening the loss of life in the event of an explosion, are not in the least appreciated by the great body of working miners in the kingdom. On the contrary, the proposal has so far met with the greatest opposition. On the part of the miners it is urged that too many attempts have already been made to find a substitute for what they consider the only true remedy—the putting down of more shafts—although, no doubt, a very costly one. By adopting such means, it is asserted, there would be no occasion for double-shifts, as the ventilation could be so improved by limiting the working area that the air could easily be made to pass through the various places, in such quantities as would be amply sufficient under ordinary circumstances to dilute and render harmless the accumulation of gas. Therefore, as double-shifts cannot be looked upon as a measure having for its object the prevention of accidents in collieries known to be fiery, the question is, why should it be resorted to for the purpose of lessening the probable loss of life, instead of meeting the matter boldly by providing more shafts? A practical and intelligent collier in South Yorkshire says it is a simple question of "inadequate ventilation for want of more shafts, and the proper distribution of the air, a matter seriously neglected in some of our collieries, as we seldom or ever hear of the air being measured in or near a man's working place, but in some parts of the mine where can be obtained the largest registration." It is also asserted that, in allowing the working places to stand for some considerable portion of the 24 hours, they become cooler, and more conducive to the health of the miner in which to renew his labour.

That at many of our large collieries more shafts are required there can be very little doubt indeed; and, perhaps, no better illustration of such being the case can be found than with regard to the Oaks Colliery, where the working faces open at the time of the explosion were more than a mile in length. It is true, with regard to that fiery and unfortunate pit, that if the double-shift system had been in operation half the number who were killed by the first explosion might have been saved. But the opponents of the system aver that had there been more shafts it is more than probable that there would have been no such accident. To some extent this is borne out by the fact that, with the sanction of some of the most eminent mining engineers in the kingdom, it was deemed necessary to sink another and larger shaft, at a distance of fully one mile from the other two. It would, therefore, appear that instead of adopting measures for lessening the loss of life from explosions in coal mines, without incurring increased expense, efforts should be directed towards finding out the best means for preventing their occurrence altogether, leaving out the question of cost. This, it is believed, could, to a considerable extent, be accomplished by limiting the area of coal to be worked by a pair of shafts, and so increasing them as the workings extended. The process would, doubtless, be more costly than the present system, but it is believed it would be more effectually preventive than any other. Had it been adopted at most of those collieries which of late years have startled the country by the wholesale slaughter caused by explosions of fire-damp, many hundreds of lives and thousands of pounds would have been saved.

That most of the views above enumerated are entertained by the leaders of the working colliers in nearly all parts of the kingdom will be apparent from the following resolution, passed a few days since at a meeting of the council of the Miners' Association held at Manchester, when those present represented from 35,000 to 40,000 miners:—

"That this meeting of the Miners' National Association Council have heard with deep regret the proposal that seems to be gaining ground in certain districts of working fiery pits by a double-shift. This council meeting, as a body of practical men, consider that were the principle adopted there would be a greater loss of life than now. The council further thinks, as the principle will so far include night work, that it will tend to debase the miners, physically and socially, as well as create more danger. The association, therefore, calls upon all miners to resist the adoption of the sytem wherever it may be offered."

The subject, it is said, was fully discussed, and the members present were unanimous in condemning it. There can, therefore, be no doubt that any attempt to introduce the system of double-shifts where there are associations, as in Yorkshire as well as other districts, will be stoutly resisted, and a demand made for the putting down of more shafts in large collieries as the only reliable course calculated to prevent serious loss of life from explosions of fire-damp. By such means only, it is evident, will confidence be given to the miners, who are now being taught to look upon fatal accidents by explosions as preventible, and who will, consequently, oppose the adoption of any system having for its object only the lessening of the loss of life by one-half in future colliery explosions. J.

THE SHROPSHIRE COAL FIELD.

SIR,—In an article on the Shropshire Coal Field in the columns of one of your contemporaries I find it stated that the New Stafford and Kemberton Pits are over the Great East, or Symon Fault. If by "over" is meant beyond, the writer, in my opinion, is very much mistaken. The Great East Fault, so far as the coal seams are concerned, has got to come; the commencement of it was indicated by the Calamincar, and by a partial denudation of the top coal in both the Kemberton shafts. I regret that other engagements prevent me at present saying more on the subject, but I shall do so on the first opportunity.—*Madeley, Salop, Feb.* 19. JOHN RANDALL, F.G.S.

IMPROVEMENT IN LEAD SMELTING.

SIR,—I have had much pleasure in seeing an improved open hearth for smelting lead ore in the works of Mr. W. B. Beaumont, M.P., invented by his chief smelting agent, Mr. Johnson; and as whatever comes from those works, where the well-known "W.B." lead is smelted, carries much interest with it to the readers of the Journal, I will give a brief notice, as I am not at liberty to give more, of this valuable improvement. The construction of this hearth is of a very inexpensive kind, exceedingly simple, and being so arranged as to have entire control over the temperature it is worked continually, with very great economy. One has regularly been doing two and a half and sometimes three times the work of the old hearth, for upwards of two years, so that its merits have now been fairly tested, and the result in every respect proved with entire satisfaction. It runs from 40 to 55 cwts. of lead, according to the quality of ore of course, in a shift of eight hours, and if I had not seen it I could not have believed it possible to smelt lead ore so quickly, and obtain so large a yield (I was told it was above 73 per cent.) of such cool and clean lead as was being smelted when I was at the works, and the skilful manner of the men commanded my great admiration.

I look upon this hearth as the greatest improvement in lead smelting that has come to my knowledge in the present century; and in districts where ore is suitable for the open hearth, and fuel is dear, it is capable of reducing the cost of smelting to a minimum.

Feb. 20. SMELTER.

IMPROVED CRUSHING MACHINERY.

SIR,—The above is the heading of a notice of another great invention, in your valuable Journal of Feb. 15. I fully agree with the writer as to the importance attached by miners to every contrivance calculated to lessen the cost of reducing ores; but if you wish to see improved machinery which shall make our poor mines pay you should set your face against such pirates or land sharks as the writer of the letter referred to; and, if we want men with inventive talent to labour, we must extend to them that protection they deserve. I cannot understand how any man can be so unscrupulous as to describe a machine as new or improved, when the same, in every essential particular, has been advertised in the Journal for several years in succession. The writer fully describes Blake's Machine, also the improvements for fine crushing made two years ago by Mr. Marsden, of Leeds, the English maker, and tells us the marked difference of the machines now under consideration and those of a similar kind which have preceded it is the giving of motion to both jaws. Is he ignorant of the fact that Blake patented the moving one or both jaws? Can it be possible that he did not see the decision of Vice-Chancellor Wood, which was published in almost every journal in the country, establishing the claim of Blake to be the principle of crushing in the hopper, with vertical diverging jaws? Then he says the lowness of first cost is likewise an important consideration. It is likewise a notorious fact that any man who steals a horse ready grown and trained can undersell the honest farmer who has raised, watched, trained, and fed the animal; and if we had no law stealing would be the order of the day, and honest labour would die out. Just so with inventors. After years of thought, experiment, and great expense, Blake got a patent for an entirely new principle of crushing or masticating stone or ores. Then the patentee's labour just begins. He will then have to go to further cost and labour, and in many instances lose half the time of his patent, before the world is able to discover the real merits of his invention; but no sooner has he proved his invention to be a boon and an honour to his country than numberless sharpers or brainless adventurers bring forth a dozen new, or "greatly improved," appliances, all showing from whence they came. I should not, Sir, have troubled you with this letter, but seeing such a glaring description of Blake's Crushing Machine, and being an inventor myself of 25 years' practice, I must condemn any charlatan, who would rob an honest and deserving inventor of his just reward. I was glad to see the determined energy displayed by the owners of this patent in stamping out the outrageous infringements, as shown by the case tried lately in the Court of Chancery, and am glad to see Blake's Crusher is daily proving itself to be the machine so long wanted in our mines.

AN OLD PATENTEE.

THE ROYAL SCHOOL OF MINES.

SIR,—Now that the subject of technical education is under discussion, I think that, perhaps, it might not be amiss to say a few words about the Royal School of Mines. One and the principal reason why our Royal School of Mines turns out so few scientific men, in comparison with the corresponding French and German institutions, is because it is so little known, and many who are aware of its existence know little or nothing of its mode of working. The School is itself well worthy of a higher reputation than is at present accorded to it. The professors are among the most eminent men in their respective departments—*e. g.*, Professors Smyth, Huxley, Tyndall, Frankland, Ramsay, &c., and the course of study prescribed for the students, extending over a period of three years, and embracing several distinct branches of science, seems to demand more general recognition as an efficient and thoroughly practical scientific education. The School at present is merely an appendage of the Geological Museum, instead of being a distinct institution, as the French School of Mines.

In 1854 the Ecole des Mines had 600 associates, whereas ours at

the present day has only 40, and as it has been established 17 years, this shows an increase of only 2¼ per annum. I have no doubt that, were the institution brought more prominently before the public the number of students would be greatly increased, and this might be done in many ways:—1. The chemical and metallurgical laboratories, lecture theatres, &c., should be all in one building. The chemical laboratory (viz., Royal College of Chemistry) is situated in Oxford-street, and the other laboratory is in Jermyn-street. The present arrangement involves considerable loss of time, and inconvenience.—2. There should be a public opening of the school at the commencement of each session, and addresses should be given, the same as in all our medical schools.—3. The diplomas of associateship, scholarship, prizes, certificates, &c., should be publicly awarded at the end of the term: this is done, I believe, at every other educational institution.—4. The "prospectus" and calendar (if it be worthy the name) should be printed and kept in a separate form, instead of, as now, being printed on some of the spare pages of a pamphlet belonging to the Geological Museum. —— A. L. E.

ON SLATE QUARRYING.

SIR,—I have read with interest the remarks on this subject in some of your late Numbers, especially what Prof. Warington Smyth says in his lectures on Mining, and Mr. Kellow in his letters. Permit me to supplement some of the observations of both parties, which it is needful to do, as Prof. Smyth obviously writes more from general observation than minute practical knowledge of slate, and Mr. Kellow as obviously is more at home in Devon and Cornwall formations than with the Welsh rock and strata. Taking first the Professor's remarks on quarrying and blasting, he omits to point out clearly the guiding reasons for laying out open quarry workings in so many floors, instead of larger clearings on one or two floors at first. The great object in all well-planned openings is to get, as soon as possible, at such a make of slate as will enable the quarry to provide its own capital for extending workings. It is a great mistake to suppose that great permanent profits can be realised without continual outlay for dead work to open out fresh bargains, to replace those working out. Indeed, these profits are most largely and certainly secured by a gradual increase in the number of slate bargains, the profit on each of which, if the rock be good, should continually be greater, *pro rata*, as the number of these bargains extends.

Therefore, as the slate rock is purer, working with less waste and more valuable produce, the deeper the bargains go down in the slate, it is obviously a leading principle to have, as soon as possible, many bargains in depth rather than many near the surface in wide openings. But the limit to this is the necessity for keeping the quarry in form, and avoiding waste in winning the slate by keeping as low as possible all loss from breakage in blasting. This renders needful a succession of working floors, one after another, like steps in a staircase. The height from one to another is kept as near as may be to 15 *yards*. (Prof. Smyth's mention of 10 to 12 *feet* as the depth in a foreign quarry is surely a misprint for *yards*.) Were the depth greater blocks from the top would be in danger of shattering and breaking in their fall. A less depth would incur waste of working space, in consequence of there being too many floors contained in a given depth.

Each of these floors must be wide enough to allow room to work the tramroad and fill and remove wagons, and to prevent the rock falling from the top from the bounding or running off the floor to a lower floor. But, as the top working to surface in quarries opened in proper form must be regularly kept ahead of the floors following underneath, each of these floors is made as narrow in width as good quarrying will allow, to leave the lowest floors in the pure slate as wide as possible, and counteract, as far as may be, the narrowing in; as, if what is said above has been understood, the reader will see why the general form of the quarry has inevitably more or less resemblance to a section of a cone standing on its smaller end. Therefore, the saving by bringing down large masses of rock in large blasts is lost, in a quarry opened to a certain extent, by the large fall produced, filling up many floors, and it may be covering for a time working slate bargains. It is obvious large blasts can rarely, if ever, be used in pure slate rock without risk of shattering and wasting the slate; and even where the quarry is in its infancy, to be cleared to some extent as rapidly as possible, in many kinds of top-rock it is no saving to bring down huge masses. For these have often to be again split up by blasting, with much cost and difficulty, before they can be removed. And the shots, instead of generally keeping one direction, as when the blasting is in the side or wall of rock to be taken down, will often, as the mass splits up, fly in all directions, to the great hindrance of work, as the men to be safe must seek cover almost all the quarry over. Therefore, large blasts require sound judgment and good quarrying to determine the situations where they can be judiciously used.

Neither the Professor nor Mr. Kellow are sufficiently clear and expressive in alluding to working by joints, both in open and covered quarries. These joints are the making or bane of a quarry. Where they are at suitable intervals nearly at right angles to the lie of the vein, large blocks of the best form to make the most valuable slate, almost wholly without waste, are easily won by working by the joints, with the least possible use of powder. Where they are irregular, and at oblique angles to the lie of the vein, they cause much waste; and if too near together almost rob the whole workable slate, even where the rock is of pure, good metal. Where there are no foot-joints, and no regular slants, the waste and expense of winning the slate takes away all profit, except where very large masses of the purest slate can be got down, and then divided; and even in these circumstances nothing but great judgment, and the best quarrying, can give the quarry a chance of paying.

Mr. Kellow's plan of underground working with arched or vaulted roof, to get a wide span between pillars, is only available in cases of what may be called *false roofing*, and in such cases is well known to, and practised by, good practical quarrymen. Roofing up with a spar, or cross-joint, in hard rock is in some positions unavoidable, and there the judicious use of the arched form in the tops of the pillars gives much strength to the roof, allowing the chambers to be wider than they could otherwise be safely made. But there the vein lies at an angle (say) of 45°, or thereabouts, as in the best Ffestiniog quarries, with leading true slants parallel to the vein; the true roof is with the greenstone, lying like a slab on the slate, uniform throughout in surface. Here nothing would be gained by the arched form; on the contrary, if leading joints at the angle of the vein went through the pillar, the arched part having no adhesion to the greenstone, and cut off behind from the pillar by the joint, would fall like a wedge. Much of the best quarrying is needed in underground workings in these quarries, so to plan the chambers and pillars as to take every advantage the joints will allow; for the slanting joints have an obvious tendency to weaken the pillars, and where they go quite through may let the upper part and roof slide off, and bury the floor with a fall. Therefore these pillars, like pyramids, must on the front widen in depth, as they cannot be kept at right angles to leading joints and false slants; and by this the lowest floors in the best slate are much narrowed in, and, as before said, the best quarrying is needed to keep this loss as little as possible, compatibly with entire safety.

About Mr. Kellow's plan for an entire change in the system of letting the winning and dressing of slate, I can hardly give a practical opinion, until it is tried, how far the best bargain takers and workmen will come into conditions of work so different from long-established usage. I have heard nearly the same ideas mooted some time back, by a gentleman of great intelligence, who had for years had the care of a large quarry, and am glad to see the matter ventilated in print. One thing is plain: the increased use of machinery, instead of the knife of the hand-dresser, tends to disturb the old mode of accounting for slate with the makers. If the most is to be made of the machinery, the plan of alloting in any way a dressing table to a bargain to keep the produce separate, cannot be carried out without trouble and delay where the make of slate is large; therefore, probably, it will before long be needful to account for the blocks to the dresser, as in the sawing and planing of slabs by machinery, leaving the dressing to be paid for, as agreed with those who stand by the tables.

A word in conclusion about lead tamping. A recent number of your Journal contained an interesting extract from the *Scientific American* on the excessive toughness and resisting power of lead so used. This called to my mind an interesting illustration of the fact in the famous safe competition at the Paris Exhibition. The German workmen could never have burst in the side of Chatwood's safe had they not used a plate of lead to keep in their first thin wedge, which would otherwise have bounded back, but which, so held, kept every fraction of a decimal of an inch won at each successive blow, until the safe was burst.

In very hard rock, especially where the nature of the work requires the greatest effect to be got from small holes, lead tamping, properly used, would never be blown out, but secure the breaking up of the rock. It might be needful to protect the fuse by a small pipe, or collar, of iron through the lead, to avoid all risk of its being squeezed together by driving in the lead tamping tight around.

London, Feb. 17. —— A MAN OF EXPERIENCE.

THE CLIMATE OF NICARAGUA.

SIR,—The news that a few cases of cholera have again occurred at Chontales will probably revive the discussion on the climate of Nicaragua, which lately appeared in your paper. Will you, therefore, allow me to make a few remarks in anticipation, in order to prevent much misconception on the subject? On referring to a well-known work, "The States of Central America," by Mr. E. G. Squier, formerly chargé d'affaires of the United States to the Republics of Central America, I find (at page 361) he thus speaks of the climate:—"The climate of Nicaragua, *except* among the mountains of *Chontales* and Segovia, is essentially tropical, but nevertheless *considerably modified* by a variety of circumstances. The absence of high mountains toward the Atlantic, and the broad expanse of its lakes, permit the trade winds to sweep entirely across the continent, and to give to the country a degree of ventilation agreeable to the senses and *favourable to health*." * * * "The temperature is very equable, differing a little according to locality, but preserving a very nearly uniform range from 78° to 88° of Fahrenheit, occasionally sinking to 70° in the night, and rising to 90° in the afternoon. During the dry season the temperature is less, the nights positively cool, and the winds occasionally chilling."

Commodore Maury, LL.D., the eminent geographer, writing from his personal experience, speaks of the climate of Nicaragua as "salubrious," and adds, "I have never heard of any disease peculiar to the country, nor of special virulence there."

Again, a gentleman who has travelled in most parts of the world, and who lately visited the Chontales Mines, thus wrote to a relation in this country—"I have been round the mines with Capt. Paul, and have seen the ore taken out myself and washed on the spot, and have been completely astonished at the richness of it in most of the mines. I have not seen anything in Australia equal to it. The *climate is good*, I should say very like the hill climate in India." Mr. Bowen, the late British Consul, lived in the country for years, and he informs me of four friends of his who respectively resided in four different localities, and each remained there in good health for 25 years. Mr. Collinson, C.E., who has surveyed a line of railway in Nicaragua, assisted by several Europeans, states that for nearly a month they were every day up to their middles in water for seven or eight hours, with nothing to eat but black beans, and barely enough of them. He adds that, they never had a day's illness, and, in fact, felt better than they did in England.

The late Rev. P. La Trobe, who was secretary of a society that established missionary stations on the coast, stated that "from all accounts he had received it appeared that the climate was very favourable to European constitutions, much more so than any of the West India Islands. They had not lost a missionary during the last fourteen years from pestilential fever."

Such are the results of the *personal experience* of persons of authority. Let me now draw attention to the facts in connection with the deaths among the employees of the Chontales Gold Company.

Capt. Francis was not only an elderly man, but was in one of the last stages of consumption when he was sent out on a temporary mission. Capt. Hill, R.N., was considerably beyond middle age, and it has since transpired that he had only a short time before been invalided from China. Sir Charles Kirkpatrick is said to have been 55, and was subject in this country to severe attacks of the disease which caused his death. Several Europeans have died at the mines from cholera, but we have not been free from severe visitations of cholera in England, which have carried off many persons. We cannot, therefore, be surprised that some should die from the same disease when it visits Nicaragua.

I fear, Sir, that people will die in Nicaragua like in any other country; there is no exemption from death there more than elsewhere. It is satisfactory to know that so few have been lost out of nearly 100 Europeans sent out by the company. Capt. Paul, with his wife and child, the doctor, with his wife, and others, appear to have enjoyed excellent health.—*Feb.* 19. VERAX.

COPPER ON LAKE SUPERIOR—SILVER IN CANADA.

SIR,—I should have written for the Journal before, but have been so busily engaged that I have not been able to obtain the information I promised you when I last wrote; I hope, however, to do so shortly. One cannot help being struck on taking up any mining paper by the numerous complaints making about hard times, and, just now, in this region we hear of nothing else. For the last year the mines of Lake Superior have been worked with the hope that matters would improve, and assessment after assessment have been made, and paid until stockholders are tired, and declare that they can pay no more. The amount of money called to meet the liabilities of mines here for the year 1867 equals $2,085,000; of this amount three mines $800,000, which sum has been principally spent in equipping them with machinery, &c.; as yet these have made small returns, but are expected for the present year to lead the Lake in production. We find ourselves now at the commencement of another year with copper at 22 cents per pound, and but little prospect of an improvement. The last year's operations have shown that with copper lower than 27 cents most of the mines now working on Lake Superior cannot sustain themselves; of the whole number at work, probably, not more than four have met expenses from returns, and it is yet questionable if either of these is in a position to pay a dividend. Several mines have stopped work, and orders from below are, with respect to others, "that the expense is to be met by the copper produced." Wages are brought down to a bare living price, and everything is being done to effect this object, while we hope for better times.

As an instance of the state of things, I might state that one of our most important mines, a mine on which the surface improvements, and other property, are valued at $400,000, and which has paid a large amount in dividends, took out for the year 1140 tons of mineral, worth 75 per cent. for fine copper, and yet to conduct the year's operations drew on the stockholders for $110,000. Things here cannot go worse, and when those mines which have been paying heavily for equipments come into full operation as producing mines some improvement must necessarily follow.

The returns of copper for the past year make a good exhibit for the number of miners employed, better, probably, than for any former year, showing that the metal is here, and it is only necessary for any practical miner to go through the mines to know that, with labour and supplies proportionate to the prices realised for produce, it can be taken out at a good profit. As this cannot be done under the existing state of affairs, and as, if the present state of things continues, the abandonment of most of the mines must shortly follow, seeing no other remedy, the residents of Lake Superior have determined on petitioning Congress to increase the tariff on imported copper and ores. Whether this will be acceded to it is impossible as yet to judge. Other interests will, no doubt, oppose it; but of the justice of the case there cannot be two opinions, nothing being asked more than a protection equal to that accorded to other metals. The case stands thus, quoting from the Lake Superior *Miner*:—

"The duties and taxes, direct and indirect, on copper under the present system amount to $4·13 on each 100 lbs. of American made metal, while that imported from other countries only pays $2·50 on each 100 lbs. Other metals have a protective tariff, equal to about 30 per cent. on productive cost, while ingot copper has only about 10 per cent. on productive cost; and there is a large consumption of these other favoured articles in the production of copper."

For instance, all mines use an immense amount of iron, and the copper miner who is protected by a 10 per cent. tariff has to pay for the iron he consumes a 30 per cent. tariff, and other articles of consumption stand in the same position. Free trade or no free trade, Lake Superior asks at least to be put on the same basis with those that produce what we consume. This subject may not be very interesting, Mr. Editor, to the majority of your readers, so I will change it. I notice in a late copy of the *Mining Journal* some remarks concerning the North Shore or Canadian Silver Mines. The world evidently is not overstocked with silver, whatever it may be; so, though it may be tiresome to talk about an article so much a drug as copper is now, silver must certainly interest.

Startling reports have occasionally reached us from the other side of the Lake, but as no extensive mining operations have been carried on, the public generally have not been much excited. Several mining men have been over and seen the country—Thunder Bay being within a day's steaming of the copper region of this side of the lake. I never paid much attention to the reports in circulation until some two months ago, when I met an old acquaintance, who had been employed last summer in sinking a shaft on one of the silver veins, he represented the vein as being large, a part carried in the shaft, from 12 to 18 inches wide, being extremely rich, in fact, he stated that pieces stuck out of the bottom of the shaft as big as a man's finger, though not being able to form an opinion of the actual value of the vein, he gave satisfactory reasons for believing that an equal amount of native silver has seldom, if ever, been met with. Since that time, I saw specimens of the rock with gentlemen residing this side of the Lake, who had been over examining the veins, and were then on their way to make application to the Canadian Government for the right of working certain properties they had selected. A box of rock in their possession, containing not less than 100 lbs., was estimated by competent judges to be worth 1 per cent. for silver; they had pieces which I saw, worth not less than 20 per cent.; they gave the most glowing accounts, and if one was at all sanguine he could fancy that the time is not far distant when the silver will be shipped down the lake by the barrel. Under any circumstances, the probabilities are that there is a great mining country on the north shore of Lake Superior, and it is a fact that some of the veins opened are rich for silver; next summer will undoubtedly—if the Government acts judiciously—be a busy one for explorers, and then more will be known of the capabilities of the mines, and the realities of current reports.

Keweenaw County, Michigan, Jan. 15. MINER.

THE DARIEN CANAL—No. XII.

SIR,—From the total absence of swamp, marsh, or fen along the line, and the great number of rivers and rivulets *(quebradas)*, with rapid currents, that drain the adjacent country and prevent the lodgment of stagnant water in its vicinity, I consider this part of the Isthmus to be healthy, and would not apprehend the occurrence of malarious fevers amongst European labourers, if of temperate habits. The reports of Dr. Wm. McDermott, of H.M.S. Espiegle, Dr. Brownlow, of the U.S. corvette Cyane, Dr. Rondat, of the French war steamer Chimere *(avis)*, and Dr. Ross, of H.M. steamer Virago, show that among 900 men who composed the crews of the vessels that lay at anchor in Caledonia Harbour, and 250 men of the Virago, which was stationed in the River Savana, in 1854, not a single case of sickness occurred during the three months of their stay, whilst the convalescence of those who were on the sick lists on the arrival of the vessels in Darien was unusually rapid. Commander Parsons, too, says—"During our stay, from January to April, we found the climate to be healthy, having had no cases of fever, although the men were greatly exposed." Lastly, Mr. Gisborne, C.E., in his report to Lord Wharncliffe, the Chairman of the Atlantic and Pacific Junction Company, dated H.M.S. Espiegle, Caledonia Harbour, April 4, 1854, says—"There have been altogether in this surveying expedition 900 persons subject to climatic influences, some along the coast and some in the interior, and I believe I am correct in stating that not a single case of sickness occurred during the whole period of our stay."

The opinion which I had previously expressed of the healthiness of the climate has thus been corroborated, and receives further confirmation from a document that I found in the course of my researches in the archives of Bogota. I allude to the diary of Serjeant Gabriel Morales, who, with Serjeants Miguel Antonio Delgado and Miguel Quintana, commanded a detachment of 150 soldiers of La Princesa regiment, who had a short time before arrived from Spain, and were sent by Lieut.-Col. Don Andres de Arisa, the Governor of Darien, to catch one or more Indians, by whom he desired to send overtures of peace to the chiefs, with the object of getting their consent to the clearing of a path from the Savana to Caledonia Bay. They started from the fort of Principe, on the Savana, proceeded to the Moreti, and thence to the Sucubti, and returned after an absence of 15 days in the height of the rainy season, without having seen any trace of an Indian. The diary concludes thus—"July 25: At noon we entered Principe, and presented ourselves to the Governor, informing him that the whole of the troops had returned *in perfect health*, notwithstanding the terribly unfavourable weather they had unceasingly encountered, there not having been one fine day; and that all had used their best endeavours to fall in with the enemy, and returned disconsolate at not having succeeded therein.—Puerto Principe, July 25, 1786: Gabriel Morales." —— E. CULLEN.

PESTARENA UNITED GOLD MINING COMPANY (LIMITED).

SIR,—Referring to the letter of Mr. Lay, to which attention is drawn by "A Shareholder," in the Journal of Feb. 8, my directors instruct me to state that Mr. Lay was discharged by the managing director from the service of the company for neglect of duty, and other sufficient reasons, and that he has since written to the managing director more than one letter threatening to attack the character of the company's employees, and demanding money as the price of his silence. Further comment is unnecessary. The directors continue to repose entire confidence in the zeal and integrity of Chevalier Francfort, and of those employed under him. J. C. GOODMAN, Secretary.

9A, *Great St. Helen's, Feb.* 19.

PESTARENA UNITED GOLD MINING COMPANY (LIMITED).

SIR,—In the Supplement to the Journal of Feb. 8 I have read a letter dated Jan. 29, signed by a certain Ludivico Lay, and preceded by a short article, signed "A Shareholder." The anonymous writer of that article knows best what his motives are in throwing out insinuations which, I have no hesitation to say, are not based upon facts. I also am a shareholder in the Pestarena United, and have been so from the beginning, having subscribed for a considerable number of shares in the Pestarena when first brought out. My interest in the company in paying shares is, I think, the largest in Italy, and larger than that possessed by most of the English shareholders. Living at a short distance from the mines, and knowing well what is going on there, I am in a position to reply to the anonymous shareholder. I do not reply, however, anonymously, and I assume the whole responsibility of what I write. I will say, first, that I have never had, nor have I now, any connection with or beneficial interest in the company, with the exception of that resulting from the investment of my money in the shares. My reason for replying is a sentiment of duty.

I have constantly advised the managing director not to take notice of attacks made by a dismissed employee, whose character does not merit such notice, an opinion which one of our most distinguished barristers here, and one of our highest officers of state, who is also a shareholder in the company, divide with me, after having read various letters which had been handed to us for examination. The writer of those letters, and of that in your Supplement, was, after many known and serious shortcomings, and not for the reason falsely stated by him, asked to resign his post during August last. Having foreseen that this would be the case, he vowed, before and after doing so, and in the presence of many witnesses, that he would be revenged. Shortly after this he commenced to write to the managing director those letters which I have mentioned, praying, first, for some kind of re-employment, afterwards asking for a loan, and finally, when he saw that no reply was given to him, he claimed to be entitled to a considerable sum of money, and threatened, at the same time, that if he did not receive it on a given day he would publish articles against the officers of the company. I know that the original of this letter was sent by the managing director to the office of the company in London. I think I have said enough about the individual to whose tissue of base falsehoods "A Shareholder" has thought well to give publicity, and to which he invites the managing director to reply, an honour which I advise him not to confer upon the author of that letter.

As regards the gentleman who is at the head of the company's business here, his great scientific and practical accomplishments, and his high and self-sacrificing character, are so well known that anything I could say in his praise would be superfluous. During his long residence amongst us in Italy he has always proved himself so faithfully devoted to the interests confided to his care that all the inhabitants of this district would bear witness in his favour against the insinuations of "A Shareholder," were this necessary. I am sure that I express the feeling of all the shareholders residing in Italy, when I say that his services are invaluable to the company. I will also add that during a long business experience I have never known a more active, faithful, and intelligent staff than is that, composed of the small number of officers, employed at the company's mines and establishments. The anonymous shareholder does evidently know nothing about them, as if he did private malice alone, as in the case of Lay, could be his motive in making insinuations against them. I doubt whether another company exists paying to men of their capacity as moderate salaries as I know theirs to be.

Finally, as regards the enterprise of the company, I will only say that I consider it, knowing the whole case much better than "A Shareholder" can possibly do, a great success as a permanent investment. G. FRANZI.

Villa Franzi, Pallanza, Feb. 17. ——

FRONTINO AND BOLIVIA (SOUTH AMERICAN) GOLD MINING COMPANY.

SIR,—One of your correspondents, who signed himself "A Shareholder," in referring to the present unsatisfactory condition of this company's affairs, in the Journal of Feb. 1, inferred that the directors had had some intimation of another revolution having taken place in the Republic of Antioqua, and as no official statement has been issued contradicting this assumption, shareholders are obviously left to conclude that it is not altogether without foundation. Corroborative of the inference is the statement made by Mr. De Pass, one of the directors of the Mariquita and New Granada Company, "that revolution is the chronic condition of New Granada." Whether Mr. De Pass made this announcement with the view of preparing the shareholders of that company for the advices by the forthcoming mail I cannot be in a position to state, but it is most

certainly at least calculated to excite apprehension among the shareholders in the Frontino Company, that in the Journal of Feb. 1 there should have appeared a communication, asking the directors if they had not received "some intimation of an active revolution," and in the Journal of the following week Mr. De Pass is reported to have stated, at the meeting of the Mariquita Mining Company, "that revolution is the chronic condition of New Granada." I fully endorse all that "A Shareholder" has put forward in regard to the non-publication of the monthly advices, but I think there is still a more serious allegation against the directors, which is that such laconic scraps as, in their judicial wisdom, they are pleased to favour the shareholders with tend to raise false hopes. For instance, I find that on Oct. 15 it was stated that Mr. Rouch would be able to make a profit of 8000*l.* a year from the three mills already at work, but according to the communication forwarded to the shareholders at the end of last month, "the entire cost of the Bolivia Mines for the month ending November was 631*l.* 15s. 2d., and the produce 287½ ozs. of gold dust, of the estimated value of 634*l.* The expenditure at Frontino was 112*l.* 5s. 8d., and the value of the produce 133*l.*" So that the shareholders, after having expended no less than 87,500*l.*, possess a property which yields the extraordinary return of a profit of 25*l.* upon one month's operations, equal to 300*l.* per annum. Inasmuch as the shareholders were led to believe the profit would be at the rate of 8000*l.* per annum, it must be admitted that the most confiding moiety of the proprietary have *some* ground for renewed dissatisfaction and disappointment.

Again, the directors pledged themselves at the last general meeting that henceforth they would convene the shareholders to a semi-annual meeting; but this was only another promise, the value of which can be best appreciated by the fact that nine months have already elapsed since the last meeting took place. Is there any occult objection on the part of the shareholders' trustees to "render an account of their stewardship?" If there is not, why is it not done? If the directors think upon the subject at all, they must be constrained to the conclusion that, after what one of your correspondents has not inaptly designated the "painfully chequered career of this enterprise," the shareholders are naturally extremely anxious as to the true position of the company's affairs. It would appear to be unjust to the proprietary to allow them to be misled by all sorts of vague rumours, premising they have no existence in fact; and it is equally unjust to them if they are kept in ignorance of any material fact bearing upon the present or future position of the undertaking. AUDI ALTERAM PARTEM.

MINERALS OF MISSOURI, UNITED STATES.

SIR,—The mineral resources of this State are, probably, unsurpassed in the world for extent and value. Among them are springs impregnated with salt, iron, sulphur, and petroleum; mines yielding jasper, agate, chalcedony, excellent lithographic stone, almost infusible fire-clay or sand, granite, marble, metallic paints, hydraulic cements, mill and grindstones, kaolin, emery, plumbago, and the more precious metals of nickel, cobalt, zinc, copper, lead, tin, silver, gold, and iron, with inexhaustible supplies of coal and limestone. Only traces of silver and gold have as yet been discovered, the other metals are very abundant. Zinc, copper, and lead are frequently found in the same mine, and thousands of tons of very pure zinc ores have been thrown away by the lead miners as a worthless impediment to their operations, and may be purchased at a merely nominal price. Copper has been found in fifteen counties, varying from 34 to 48½ per cent. pure copper, and has been found lying only 20 ft. below the surface, and in beds several feet thick. Owing to the larger capital requisite to reduce zinc and copper ores to the metallic state as compared with lead but little attention has been devoted to them, but where they have been worked the profits have been very satisfactory.

Recently immense deposits of tin ore have been discovered not far from Pilot Knob and Iron Mountain, in Madison county, and it is believed that they will prove the largest deposits known in the world Active preparations are being made to develope them. Lead has been discovered in over 500 localities; its veins run through 20 counties, and intersect an area of more than 6000 square miles. The ores are chiefly galena, and vary from 60 to 84½ per cent. of pure lead. They are found in many places at only 10 feet from the surface, and it is very rare to find any lead mine over 75 ft. deep. The reason is that the miners have hitherto engaged with little or no capital, and found plenty of lead at points near the surface, although it has been the invariable rule that the deposits of lead ore increase in extent and value in proportion to the greater depth reached. The gangue is usually sulphate of barytes, magnesian limestone, or red clay, mixed with brown hematite, pyrites, and ochre. The ore lies in beds varying from 1 to 18 in. of pure galena, and immediately thereunder beds of less pure mineral from 4 to 6 ft. thick. At present the best only is removed, as proper means of crushing and dressing the ore are almost unknown. An average day's work for a miner is 200 lbs. of pure galena; were the thick ore also brought out, crushed, and dressed this yield would, of course, be very much increased. At a mine where only the best and purest galena was extracted the following results have been ascertained as the average of working 100 drills. Each drill yielded an average of 700 lbs. daily, or 18,200 lbs. monthly. The daily expense of each drill averaged $7. Their furnaces averaged 60 pigs of lead daily, at a cost for smelting of $35. The lead ore yielded 66 per cent. pure lead. The profits may, then, be calculated as follows:—

	MONTHLY.	
100 drills, at 18,200 lbs. ore—1,820,000 lbs. ore, yielding 66 per cent. —1,213,332 lbs. lead, at 8 cents		$97,066·56
COST.—100 drills, 26 days each, at $7	$18,200	
Smelting 1,213,332 lbs. lead, or about 16,400 pigs	9,590	
Fright to St. Louis, at ½ cent per lb.	6,066·66	
Commission for selling, 1 per cent.	970·67 =	34,827·33
Monthly profit		$62,239·23

At the present rate of gold and exchange this would be nearly 9000*l.* profit monthly. The company's shares sell considerably over 200 per cent. the amount paid up. Iron ore of several kinds, and of great purity and abundance, is found widely spread over the State, but the mountains of nearly solid iron found in St. Francois, Iron, and Reynolds counties are the most remarkable. Shepherd Mountain is 660 feet high, and consists of a pure quality of magnetic and specular ore. Pilot Knob is 1118 feet above the Mississipi river, its base, 581 feet from the summit, is 360 acres. The iron ore is known to extend 440 feet below the surface. The upper section of 141 feet is estimated to contain 14,000,000 tons of ore. Iron Mountain is 228 feet high, and the area of its base 500 acres. The solid contents of its cone are 230,000,000 tons. It is believed that, every foot below the surface will yield 3,000,000 tons of ore. At the depth of 180 feet, an artesian auger is still penetrating solid ore. The ore from these mountains is almost exclusively specular, and yields about 56 per cent. pure iron. The iron produced is strong, tough, and fibrous. Coal of excellent quality underlies a large portion of the State. It has already been proved in 30 counties; beds of Cannel coal, 45 feet thick, have been found. There are 160 square miles of coal in St. Louis county. The quantity in Cooper county is estimated at 60,000,000 tons. Every acre of Boone county is said to contain, at least, $1000 of coal. The deposits in the vicinity of Booneville cover 2000 square miles, and have an average thickness of 3 feet. It is estimated that there are 26,887 square miles of coal lands in the State, of an average thickness of, at least, 8 feet. The coal mines are shallow, cool, and healthy; the thickness of the seams generally permits work in an upright position. There has never been a single fatal explosion in any coal mine in the State. From the foregoing statements it will naturally be asked, to what extent are these enormous sources of wealth worked? In reply, it must be confessed that they are comparatively untouched. The reason for this lies in the blighting effects of slavery which, till the termination of the war in 1865, prevented respectable white emigration, but since then the population has rapidly increased. Another reason is the high value of money in the State, 3 and 4 per cent. per month being freely offered, with sound security. The State was originally settled by a French colony, and much of the land is still owned by their descendants, who retain their ancestors' old-fashioned caution to a great extent, and while very willing to see minerals developed by others, are too stolid to venture themselves. As their lands are very fertile, they have certainly a fair excuse for being satisfied with their surface crops. The geographical advantages of the State are very great, commanding as it does the trade of the magnificent Mississippi Valley, while by the network of railways, built and in progress, the vast and growing trade with the Far West is being centralised at St. Louis. The salubrity of the climate is proverbial, and permits the widest range of products, and the full exercise of physical powers. The mining regions possess excellent means of transport, either by rail or river, and the market at St. Louis affords a ready sale for their produce. Since the war everything is sold for cash, which keeps trade in a sound and healthy state. The State affords endless openings for the profitable employment of capital. Mineral lands of excellent quality can often be bought at a cheap price, according to their situation and the minerals they are known to contain. Should any of your readers desire to purchase mineral lands in the State, I shall be happy to correspond with them on the subject.

MINER.

Box 268, Fair Haven, Connecticut, United States.

Meetings of Public Companies.

ENGLISH AND AUSTRALIAN COPPER COMPANY.

The seventeenth annual general meeting of shareholders was held at the London Tavern, Bishopsgate, on Thursday,

Mr. R. A. ROUTH in the chair.

The usual preliminaries having been disposed of, and the report taken as read, the CHAIRMAN stated that since the last ordinary annual meeting they had passed through a season which they had hoped would have been more prosperous, but as it was the balance-sheet showed a profit of more than 8000*l.*; however, they had done their best to promote the interest of the company, and he thought that the shareholders generally would be satisfied with the results. The gross quantity of ore delivered to them by the Burra Burra Company for the year ending June 30, 1867, was 5616 tons, against 6936 tons in the preceding year. The gross quantity from other mines during the same period was 3434 tons, against 3310 tons. The quantity of ore smelted at the Burra Smelting-Works was 2808 tons, against 3446 tons. The rough copper made at the Burra Smelting-Works was 759 tons. The quantity of copper made at the Adelaide Smelting-Works was 2174 tons, against 2344 tons in the preceding year. The quantity of copper shipped from South Australia during the year ending June 30 was 1495 tons, against 1409 tons in the preceding year. The shareholders would, therefore, see that, on the whole, the year had not been unsatisfactory. The work at the Burra Mines had been limited, but they were now extending the mining operations, and a larger supply to their smelting-works might, therefore, be expected. For many years they had only had the advantage of a railway for 50 miles out of the 100, and the company had long been wishing for the extension of the railway accommodation. The Legislature of South Australia had now determined upon having the line completed to the Burra. This would be a great advantage to the company, as it would facilitate the opening out of many other mines, which was an important element for the future. As to the wharf extension, the profit had been 1800*l.*, or about 500*l.* more than in the preceding year; and, as labour was getting cheaper, owing to the abundance of labour at disposal, a reduction in wages having already been made and submitted to, he hoped this profit would be permanent. The opinions as to the future of the copper trade were conflicting, but it was extensively felt that the present depression was due not to overstocking but to the non-revival of general commerce. The directors had already mentioned to the shareholders that they had obtained a bronze medal at Paris for the purity of their copper, and at the Exhibition at Adelaide a gold medal had since been obtained for purity of copper also. But a still more valuable evidence of the quality of their copper was to be found in the fact that its price in the market was 4*l.* in advance of "best select," so that the quality was well recognised in the trade.

Mr. TAYLOR enquired whether they were likely to have much copper from the mines of the North, and observed that it would be imprudent, in his opinion, to look for any rise in price.——The CHAIRMAN said that they were now receiving ore from the Yudanamutana Mines, and were likely to enter into a contract with that company. Of course they could only make such a contract as would leave a fair profit to their own company; but, beyond this, they were always ready to do their best to foster mining in the colony. The mines of the North had a very great difficulty to contend with in getting their produce down, but if they got improved means of transit the case would be very different.

Mr. J. ANDERSON could not see how the price of copper could affect them, inasmuch as they were a smelting company, and not a mining company.

The CHAIRMAN explained that a depressed market was felt by them as by all others in business.

The report was then put to the meeting, and unanimously carried. A dividend of 1s. per share was declared. Messrs. R. A. Routh and Spencer Herapath were re-elected directors, and Mr. J. Viney was re-appointed shareholders' auditor.

The proceedings then terminated in the usual manner.

NEVADA LAND AND MINING COMPANY (LIMITED).

A special meeting of the shareholders in this company was held on Monday, to receive a report from the provisional directors, and to appoint a permanent board,—Mr. E. L. NUGENT in the chair.

The report stated that an agreement had been concluded for the purchase by this company of the entire property of the late Washoe Mining Company, in Nevada, subject to the debts due in America, for the sum of 5000*l.*, to be taken by the liquidators in paid-up shares. The debts, which this company would have to pay as part of the purchase money, were stated to amount in all to 12,998*l.* 8s. 5d., of which 4226*l.* 4s. 5d. had already been settled, the balance bearing interest at the rate of 7 per cent. per annum from Jan. 25 last, and payable by instalments extending over a period of 15 months from that date. The entire purchase money would, therefore, inclusive of interest, be within the sum of 20,000*l.* named in the prospectus of the company. Instructions had been forwarded to Mr. E. F. Dunne, the acting manager, to turn his attention to letting the mill at the Truckee, and making the property there profitable at the earliest possible moment, and to making a beneficial arrangement with the Pacific Railway Company, whose works are now only about 25 miles from the property. The mill and machinery had been painted, and were in good order. Mr. Dunne had been instructed by telegram to recommence driving the tunnel in the Whitmore Mine, at an expenditure of $1000 per month. The whole of the 15,000 shares forming the first issue had been placed, including those to be given in part payment for the property.

The CHAIRMAN, in moving the adoption of the report, called attention to the satisfactory arrangement made by Mr. J. J. Dunne with Messrs. Kelly and Co., the bankers in New York, by which the company were put in possession of the Truckee property at once, the payment of the purchase money extending over a lengthened period, and to the fact that a report had been received by Messrs. Kelly from their agents, to the effect that the mill and machinery were in good order, and the titles correct. Having recalled the difficulties with which the provisional directors had had to contend during the past half-year, he congratulated the shareholders on the operations of the company being at length commenced, and with a good prospect of success.

The adoption of the report was seconded by Mr. SNOWDEN, and, in reply to questions put, the CHAIRMAN stated that the total expenditure in driving to reach the ledge on the Whitmore Mine was estimated at 3000*l.*, and that, with this exception, no outlay on the property would be necessary, unless it was thought desirable hereafter to erect smelting works, which would cost about 2000*l.* The tunnel at the mine, if driven at a cost of $1500 per month, could, it was believed, be completed in eight months, and it was hoped that some return might be obtained before long from the Truckee property.

The report was then unanimously adopted, and the meeting proceeded to the election of permanent directors.

On the motion of Mr. MARETT, seconded by Mr. GRIFFITH, the following gentlemen were unanimously elected directors of the company:—E. L. Nugent, Major-General C. P. Rigby, F. Snowden, Alan Swinton, and G. P. Whitworth.

A motion was then put and carried, "That the directors be empowered to issue the remainder of the shares of the company, to be offered in the first instance to existing shareholders, *pro rata*."

A special vote of thanks was accorded to Mr. J. J. Dunne, for his able and valuable services in concluding negociations with Mr. Kelly; and to the provisional directors, for their indefatigable exertions in the formation of the company.

It was stated during the meeting that the specimens of the silver ores of Nevada sent to the Paris Exhibition might now be viewed at Palmerston-buildings, and that by far the finest specimens were from the Sheba Ledge, on which the Whitmore Mine is situated. The official report of the county surveyor, and the workings of the De Soto Mine, adjoining the Whitmore, were also alluded to, as confirming the statements received as to the Sheba ore.

ROYAL COPPER MINES OF COBRE.

The adjourned meeting of shareholders was held at the offices, Gresham House, on Thursday,—Mr. PASCOE C. GLYN in the chair.

The notice convening the meeting was read.

The CHAIRMAN said the shareholders had been made fully acquainted with the position and prospects of their property in Cuba by the report of Mr. Clemes, and they were equally aware that, in the present crisis in the history of the company, whatever action took place, it should be adopted as speedily as possible. As to the dispute with the railway company, the shareholders were informed upon the last occasion that that company had given the Cobre Company until the 15th of last month before taking any hostile steps, and by the last mail the directors were informed that the threat of the railway had been to a certain degree carried out, by an attempt to stop some of the supplies in course of transit from the port to the mines. The agent of the Cobre Company, however, has been able to get the supplies forwarded, although while this was going on their chief agent was absent, owing to the quarantine regulations. There was reason to hope that by this time he was at the mines, and had satisfactorily adjusted the difficulty. As to Mr. Clemes's report, the board considered that it was thoroughly reliable, and, therefore, the first consideration of the meeting was as to what course should be adopted. In the summary of that report—which was really the pith of the whole—two alternatives were proposed, both of which required more capital to be found, Mr. Clemes's distinct opinion being that it was not advisable to hastily abandon a property of such a character. Of course, there was some difference of opinion amongst the shareholders, some being desirous of subscribing more capital to carry on the enterprise, while others, being in the position of trustees, were legally precluded from doing so; and others had distinctly declined to pay their calls unless they were released from further liability. The directors, therefore, considered it their duty to adopt some mode by which the objections of both parties would be met. Since the last meeting an outline of a scheme had been placed before the board, which they proposed to submit to the shareholders' consideration. They did not at present put it forward as official, but merely as the outline of a scheme that it was thought probable would meet the wishes of the majority of the shareholders. The plan was to form a new company, with a capital of 200,000*l.*, to be divided into A and B shares, of 5*l.* each, the former to receive dividends up to 15 per cent. per annum out of the profits before the latter receive anything. It was estimated that 2*l.* 10s. per share would be sufficient to carry out Mr. Clemes's computations. The B shares would be credited as fully paid-up, and would be issued as scrip payable to bearer. For every share in the present company there would be given two B shares in the new company, which would be entitled to an equal division of the profits after providing for the payment of the 15 per cent. on the A shares, and the right of claiming a similar number of A shares. The new company would take power to raise new capital if necessary, which the directors believed and hoped would not be wanted. At the end of Mr. Clemes's report a statement was given of the value of the company's property in Cuba; and, although if it were determined to wind-up the present company, the valuation would prove to be extremely problematical, yet the board were agreed that some notice should be taken of those properties, and that a certain amount of cash should be paid to the old proprietors. The new company would, therefore, pay 10s. per share to the old shareholders; and although, if every present shareholder became an A shareholder, it would be only taking the money out of one pocket to put into the other, yet it would be an equitable arrangement for dissenting shareholders. By this proposal, the working capital of the new company would be 100,000*l.*, represented by A shares. The scheme, of which he had given a rough outline, recommended itself to the board, as they hoped it would to the shareholders, for, according to Mr. Clemes, by the expenditure of the proposed amount of capital, there was a very good chance of being rewarded with a substantial success. (Hear, hear.)

Mr. CHALLIS said he had been a large shareholder for more than 20 years, and he had no hesitation in stating that the Chairman's propositions, so lucidly explained, could not fail to at once recommend itself to anyone connected with the undertaking. He believed the first paragraph in Mr. Clemes's report was of itself sufficient to induce mining capitalists to expend the proposed amount of capital, supposing there were no plant or machinery upon the mine, and that shafts had not been sunk or levels driven. He had much pleasure in proposing the following resolution:—

"That the meeting concurs in the opinion expressed in the report of Mr. Clemes, that the company's mining property is too valuable to be abandoned. That inasmuch as a sum of not less than 50,000*l.*, spread over a period of three years, may be required for the further development of the mines, the uncalled capital of the existing company may prove insufficient for that purpose, and moreover it might not accord with the wish of all the shareholders that the whole remaining capital of the company should be called up. That for these reasons the meeting approves of the suggestion which has been made for the formation of a new company, with a sufficient capital for the further development of the property, and invites the shareholders generally to concur in raising the required capital, and thus securing for themselves the returns which may yet be realised from their mines. That the scheme which has been proposed from the Chair, appears well calculated to effect this object, by offering a preferential dividend to the subscribers of the new capital, and at the same time a substantial interest in the company to those shareholders who may not be disposed to embark further capital. That the meeting, therefore, heartily recommends this scheme to the favourable consideration of their brother shareholders, in the hope that it may prevent the loss of a mining property which has been a most productive one, and which the meeting considers there is good ground for believing may yet be restored to its former prosperity."

Mr. DENOON seconded the proposition

Mr. HEDGECOCK was convinced every shareholder would heartily support the scheme, as so ably shadowed forth by their excellent Chairman. He believed they had reason to look forward to the realisation of a good dividend within the present year.——Mr. CHALLIS was fully prepared to take his proportion of the A shares, and he believed the board had put down their names for shares which represented something like 7000*l.* (Hear, hear.)

The resolution was then put, and carried unanimously.

Mr. CHALLIS said there was another resolution, which would form a natural rider to that already passed. It was as follows:—

"That the directors be requested to take the necessary steps for communicating the above resolution to the shareholders generally, and inviting their co-operation in raising the new capital."

Mr. HEDGECOCK seconded the proposition.

Mr. PALMER (a director) said every member of the board was prepared to take his proportioned interest in the new company, for they had confidence in the report of Mr. Clemes, and believed that in the Cobre Mines they still possessed a valuable property, and one that would amply repay them for an additional expenditure of capital. (Hear, hear.)

After some discussion, the resolution was put and carried unanimously.

Acordial vote of thanks to the Chairman and directors was passed, which terminated the proceedings.

NORTH WHEAL CHIVERTON MINING COMPANY.

A general meeting of shareholders was held at the offices, Gresham House, on Thursday,—Mr. GEORGE NOAKES, F.G.S., in the chair.

Mr. PARRY (the secretary) read the notice convening the meeting, and the minutes of the last were confirmed.

The report of the committee of management was as follows:—

Feb. 20.—The committee have great satisfaction in stating that the development of the mine continues to be carried on with the utmost vigour. All the operations, so far, have been completed within the prescribed time and outlay. The 80 has been extended still further east of the sump and west of Mew's shaft, through ground showing the same favourable indications as those which have characterised the lode through the whole length of this level. The engine-shaft has been sunk 12 fms. below the 80, and all necessary work completed to start the cross-cut to the lode. The committee look forward with anxious interest to the result of this operation, as it will be the first trial of the lode below the 80. In the meantime the engine-shaft will be carried down with all speed, in order to attain the great object for which this company was specially formed—to prove the lode at or below the 100. The committee have the strongest hope, seeing the favourable channel of ground now under development, that the lode will be found to improve in its productive character for silver-lead in depth. They, therefore, continue to regard the adventure as one of great promise, and to fully justify the outlay to prove it.

The report of the agent was read, as follows:—

Feb. 19.—Since your last general meeting the engine-shaft has been sunk 6 fms. 3 ft. 6 in., in a good channel of ground, and is now the required depth for a 90 fm. level (which is 12 fms. 2 ft. 6 in. below what is called the 80 fm. level); shaft cased and divided, and footway fixed. We are now engaged cutting plat, which will be completed by the latter part of this week, when the sinking of the shaft will be resumed, by 12 men, as well as cross-cut to the lode, by six men. From the present nature of the ground we calculate to intersect it in about five weeks. The 80, west of Mew's shaft, has been extended 10 fms. 3 ft., and is now 30 fms. 1 ft. from the shaft. In the present end we have just intersected a small cross-course, but how large the lode is to the west of it I cannot at present say; we are carrying about 4½ feet, and no north wall, composed of beautiful soft quartz, mundic, silver-lead, blende, and spots of copper, but not enough at present of either to value, and letting out water freely. This is certainly a most promising end; driving by four men, at 50s. per fathom. The 80, east of old sump-shaft, has been extended 5 fms. 2 ft. east of the cross-cut; this end has been valuable for the last 6 fms., worth in places 2½ tons of blende, and 4 and 5 cwts. of silver-lead per fathom, with good stones of copper ore. The lode in the present end for the portion carried (3 feet) is worth for lead and blende 5*l.* per fathom; driving by two men, at 80s. per fathom. We have two men stopping the back of this level, at 60s. per fathom; lode 4 ft. wide, producing ¼ ton of lead per fathom, 1 ton of blende, and rich stones of copper. There are still 12 feet of lode standing to the north of this level and the level that was driven on the north part, which may be cut through when convenient. This run of productive ground, combined with the different parts of the lode that have been operated on between this end and the end west of Mew's shaft, which you have had full details of in former reports, and the beautiful channel of ground the engine-shaft is sunk through, make us anxiously look forward to the intersection of the lode in the 90, and confirm our oft-expressed opinion that the characteristics of the lode in the 80 can scarcely fail to be remunerative in the 90, or at a deeper level. We have at surface, dressed and undressed, about 10 tons of lead, 20 tons of blende, and from 2 to 3 tons of copper ore. The machinery is in good working order.—WILLIAM HANCOCK.

The CHAIRMAN said the shareholders had already been made aware of the financial position of the company up to the date at which the audited accounts were made up, and the annexed statement showed their position up to the present day:—

The audited cash account to Jan. 31 last showed a balance in hand of	£2439 7 10		
Since which date there has been received for blende ores sold	44 15 11	= £2484	3 9
Paid—January cost and bills	230 18 3		
London expenses	45 11 6	= 276	9 9
Balance in hand this day		£2207	14 0

The CHAIRMAN said for so young an enterprise—young as regarded the present company—he would unhesitatingly state, and he felt he could do so conscientiously, that North Chiverton, as a mining adventure, was as fair a one as any in Cornwall, whatever might be the results when the lode was struck at either the 90 or 100 fm. levels. Looking at the favourable character of the ground developed by the present company, and also to the fact that every indication improved as the development progressed, there certainly seemed increased encouragement to hope for satisfactory results, and that the shareholders will be rewarded for their outlay. As he had stated upon a previous occasion, he was fully convinced that the indications perfectly justified the expenditure of capital, and he would say no more upon the present occasion, because the time was rapidly approaching when the mine would be of great interest, not only to the shareholders, but probably to the mining public generally. There was in the district another mine yielding most profitable results, which commenced operations, a few years since, under precisely similar circumstances. Whether North Chiverton would yield similar results it was impossible to state; all that could be at present stated was that, viewing the district and the favourable indications of the ground under development, there was reason to hope that their anticipations would be realised. Without flattery to their surveyor, he might state that the plans of the mine had been prepared with considerable skill, and he could only wish that all the shareholders were present to see them.

Mr. LUCAS asked how long it would be before the lode was intersected?

The CHAIRMAN computed there were about 7 fathoms to drive before the cross-cut would intersect the lode.——Mr. LUCAS had understood there were other lodes in the sett well worthy of development.

The CHAIRMAN said the committee had laid down this principle—that, as the company was commenced for one specific object, it should be carried out. They had subscribed their money to prove the lode in the 90 and 100 fm. levels, and they believed they had sufficient capital in hand to do it; therefore, they would not at present prosecute any speculative operations.

Mr. E. COOKE said it was a most satisfactory feature that at the various winzes sunk below the 80 the indications were such as to lead to the expectation that a productive lode would be found in the 90. As allusion had been made to other lodes, he might state that there was a south lode, which had produced 12 cwts. of lead per fathom.——The CHAIRMAN had not referred to the winzes sinking from the 80, because he had adverted to them upon a previous occasion.

Mr. HILL (a member of the committee) stated that as the development of the mine progressed the more satisfied were the committee that they were embarked in a legitimate enterprise, which could not fail to be satisfactory to the vendors.

The CHAIRMAN said his only regret was—which he had previously expressed—that the company had not got another 1000*l.* from the vendors to develope the mine; but if it became profitable they might probably forget that.

Mr. RAWLINSON thought the shareholders would have very good reason to be perfectly satisfied with their bargain.

Mr. PETER WATSON said that shareholders should be made acquainted with the fact that if the lode should happen to be poor just at the point of intersection it should not, therefore, be concluded that upon further development it would not prove productive. As the lode was large, it would probably take a fortnight or three weeks before it was cut through, and the most productive lodes were always variable in value.

The report and accounts were received and adopted.

Mr. DRIVER, in proposing a vote of thanks to the Chairman, stated that whatever might be the result of the development of North Chiverton, the fact that Mr. Noakes was at the head of the executive was a sufficient guarantee that every detail would be carried out with integrity and efficiency.

Mr. LUCAS seconded the proposition, which was put and carried unanimously.

The proceedings then terminated.

Royal School of Mines, Jermyn-Street.

MR. WARINGTON SMYTH'S LECTURES.

[FROM NOTES BY OUR REPORTER.]

LECTURE XXXI.—The securing of shafts frequently involved the use of timber on a large scale. Of course, if a shaft were opened merely for preliminary explorations, or in the case of military mining, or where it was required to be carried out with great rapidity, consequent on some unfortunate accident, it would be necessary to frame the timber in small squares, 3 or 4 feet across, and the methods employed were simple and easy of application. In ordinary sinking of this kind it was usual to divide the shaft into two parts, called "halfing." Various methods were employed to secure the mouth of the shaft, and some consideration of the nature of the ground was always necessary. Strong beams, laid crosswise over the opening, and extending for some feet beyond it on either side, was a common plan. Sometimes a rectangular framework of great strength, with a central square over the orifice, formed by strong rafters, was used.

In metalliferous mines they very seldom attempted to sink to any considerable depth without special care to protect the men employed from any materials which might fall down the shaft. This was done by a "pent-house," which consisted of a number of strong pieces of timber placed crosswise in the shaft, filled in with planking, with a small opening left for the passage of the kibble, or bucket, and also for the men to pass through. To carry this system out satisfactorily they would put a small windlass to raise the material excavated as far as the pent-house, so that it could be brought to the surface by the machinery at the top of the shaft. These precautions were very much opposed to the ordinary plan for sinking vertical shafts in stratified deposits, where they sometimes saw a yawning shaft, 200, 300, or 400 yards in depth, without the slightest precaution to keep away strangers at the surface, or protect the men working in it from the fall of a plank, tools, rubbish, or other like dangers. To protect the sides ultimately they might desire to put in brick or stone work; but for temporary purposes timber would generally be employed, and in most of the metalliferous mines would remain as a means of protection. A shaft at the Tresavean Mine, 310 fathoms deep, was sunk for some distance in solid granite, which, being extremely hard and tenacious, would endure for years without artificial protection; but even granite—where it was jointy, where strings passed through it, where it was decomposed, or where it was intersected by cross-cuts—might be far from secure. Again, at the Samson Mine, Andreasburgh, there was a shaft which inclined first in one direction, then became perpendicular, then it inclined in an opposite direction, and again followed the perpendicular. Here, too, strata had been passed through of which as much as 100 fathoms required no timbering, whilst other parts of the same shaft taxed all the resources of the engineer to make them secure. It was very desirable at the outset, if the opening were to be timbered from the surface, that they should lay out the plan of the shaft very definitely, and get their angles correct. A very simple way of doing this at the surface was by applying the famous 47th problem of Euclid. In sinking, also, it was necessary to be careful that there was no deviation from perpendicularity, as afterwards, when pumping machinery was put in, such blunders involved great expense and trouble in their rectification. The remainder of the lecture consisted of descriptions by drawings of various kinds of frame timbering required by the innumerable varieties of incident which occurred through the diversities of ground met with.

LECTURE XXXII.—Although simple means only were necessary in ordinary cases, something more than mere steddles, or upright posts, firmly kept asunder by diagonal struts, was necessary in a large proportion of cases. The merest inspection of the sections of a shaft showed how great a variety of differing circumstances had to be dealt with, and it became obvious that methods of securing the sides which answered well in some portions of a shaft would not apply to others. In the cases of vertical shafts it would happen that one portion was stronger, another weaker, a third more or less broken up by cracks and fissures, and requiring very strong timbering indeed; while other parts would be free from difficulties of this sort, and only require a few timbers thrown across for the convenience of the workmen, and to serve as supports to the framework upon which the men below might be suspended. There was, however, a difference between coal and metalliferous mines. In the former the whole shaft would most frequently have to be lined or secured by timber, or brick or stone work, while in the latter a great proportion might be left to support itself, without any particular risk. The same treatment, therefore, would not generally be applicable to both. If they took the section of any given mine, they would observe that after it went down to a moderate depth a great number of different levels were struck out from it, in which the workings were carried on, perhaps, all at the same time, and it was impossible, therefore, to remove from the mouths of all these levels the material brought there to be raised. There must, consequently, be an accumulation of material to a great or less extent at all of these levels. Suppose there were ten levels opening into the shaft, and the machinery would only draw as much as one day's produce of one level, they must have at the mouth of each space for the accumulation of ten days' work. Where sufficient attention was not paid to the provision of these spaces the material was thrown in the level, and sometimes so carelessly as to interfere seriously with the ventilation, and to be very inconvenient to the men, whose knees would be cut to pieces by crawling over the sharp pieces of rock. Here, again, there was much difference between collieries and metalliferous mines. If in the first there were two successive seams, it might be requisite to clear each in the course of a day, and arrangements would be made for that purpose; but in the latter, if it were a mine of any size, it would be necessary to establish at each level a tip-plat. This was done by excavating the level to double the depth, and carrying the rails over the opening upon timber beams and props, while into the hollow space below the wagons were tipped. The opening of plats in certain kinds of ground was a very difficult operation, and it was always necessary to put in timbering at these points, to preserve the sides of the shaft intact. In very large levels they might open so wide a space for this purpose as really to constitute a source of considerable danger to the safety of the men. On the Continent, where things were done on a large scale, they had extensive plats, and so were able to divide the attle from the ore in these temporary stowages; and both there and in England there were many ingenious contrivances (which he described by drawings) to keep the drawing rope from friction against the top of these openings.

Mr. Smyth then passed on to the subject of securing shafts by stonework, or "steining," and walling. Suppose a circular shaft were intended to be walled to a certain depth, it was usual first to line the upper portion with timbering of a temporary kind, until they got down to some kind of rock which afforded a secure foundation for masonry. Then, having cut the shaft a little wider than necessary, they would begin to build the wall of stone or bricks, so as to make the shaft of the dimensions required, removing the temporary timbering as they advanced. Many difficulties were found in getting good foundations, and it was often necessary when shafts were not intended to be kept open for any length of time to rest the walling on cross timbers; or, where more durability was required, supporting it on arches instead of timber. In this country, where leases seldom get extended beyond 21 years, there was much less inducement in such mines to aim at lengthened durability, but on the Continent, where the mines belonged to the Government, and where they were let to the adventurers in what might be called perpetual leases, very gigantic and admirable works were executed, to last 50 or even 100 years. It was not surprising, therefore, in this country that the system of bratticing should have come into vogue. This introduced a source of great risk, although many collieries in the North of England had been carried out to enormous distances by the means of a single shaft. In these the shaft was divided into two unequal parts, one of which would be devoted to the duties of an upcast and the other of a downcast, the men being lowered and the material being raised in the larger section. These divisions were effected by strong timbers, resting closely on each other, and then packed and caulked. Sometimes a shaft would be bratticed from the centre, and thus divided into three equal parts. It was obvious that if anything in the shape of a fire took place, and where there was a furnace below for the purpose of creating a current of air for ventilation, the brattice would be very apt to heat, if it did not take fire, and so be easily knocked down by any accident in raising the mineral—the lives of all in the pit would be jeopardised. Many sad cases had occurred in which, from the destruction of the brattice, the up and down-cast arrangement for ventilation had been cut off, and every living creature in the works had been suffocated. Some of these cases had caused the interference of the Legislature, and now it was illegal to work a mine without its having two separate and distinct shafts. Nevertheless, many kinds of bratticing came into play in the workings themselves, with great advantage.

The lecturer concluded by describing several varieties of brick lining, illustrated by the works carried out in the Whitehaven collieries belonging to Lord Lonsdale, in Westphalia, and elsewhere on the Continent.

LECTURES XXXIII AND XXXIV.—They had now to consider (said SMYTH) another point respecting shafts. In many cases, in metalliferous mines and mines worked on the stratified deposits, a large influx of water might be met with in one portion of the shaft while another portion would be free. The question, therefore, was how to keep out this water, so as to enable them to work the mines afterwards without keeping large and expensive machinery in action. If they saw the history of some of the large shafts of which he had spoken, they would see how large a portion of the difficulties which had been encountered and overcome had arisen from influx of water. For example, he knew a coal mine shaft in the North of England in which a spring was cut which yielded 1500 gallons of water a minute, and, of course, it was very important, if possible, to keep this back, because, supposing they had put up pumping machinery to raise that water, they might at some depth further down cut another spring. If the water could not be kept out by pumping, such an influx would tax to the utmost the efficiency of the most magnificent steam engines, and, perhaps, cost so much money as would make it advisable to abandon the work. If they took a metalliferous mine, with a shaft sunk on or adjacent to a lode which went down almost vertically, and cut a heavy feeder of water, this sort of problem would often occur, but if it were decided to go on, every drop of water they could keep out of the shaft was of importance, as it would otherwise be required to be pumped out. The means by which this was generally effected was called tubbing, a system which, although involving a great expense at first, was, nevertheless, so important that every mine manager should be perfectly competent not only to judge of cases in which it might be advantageously employed, but also to select that method, and that kind of tubbing, and that preparation of its different constituent parts, which would enable him to best combat the circumstances of his particular mine. He would take the case of a shaft having to be sunk in ground of a porous nature, more or less aproximating to quicksands, such as where they had the former bed of a river to deal with. If the depth they had to sink was very shallow, it was a matter of very little difficulty, with either wood, stone, or brickwork, to keep out the water, but when they got down to a depth of (say) 50 or 60 fathoms, and had to contend with the great pressure due to a column of water of that height, they would necessarily have at the bottom of the shaft so great a pressure as to cause very great difficulty in preventing water from forcing its way through the chinks of ordinary timber, however close it might be put in. The only way to keep out the water was to put in a water-tight joint at the base of the watery ground, in such a way that the water could not get past the joint. This was a matter of considerable difficulty, but if effected they might then continue sinking, and probably get into a rock which was water-tight, and so complete their sinking without the necessity of pumping. If they came upon a water-bearing bed it would be necessary to adopt some system of tubbing. It might be effected by sinking a shaft through the water-bearing bed into a water-tight portion of the ground, where, putting in an artificial foundation, and making it perfectly firm, they might fix all round the shaft tubbing, so as to prevent the water from coming in. When they had put in tubbing through the whole of the water-bearing bed, they should put another water-tight joint at the top of the tubbing, and so the water would be kept out there, and they might continue their sinking in dry ground, or with very little infiltration of water. If they met with an alteration of the watery ground they would again have to resort to tubbing. If the ground were very loose in its texture they might, there was little doubt, meet with a great quantity of water, at intervals, all the way down, and, therefore, in sinking through that kind of strata it had been necessary, instead of waiting until they got a perfect foundation for the tubing, to put in a temporary foundation at a shallow depth, to carry their tubing from that foundation upwards as far as requisite, then to sink to a greater depth, until they came to a place suitable for a second foundation, from which they could put in tubing as far as the first foundation, and so repeat the operation until they had completed their sinking, when a firm foundation would be got at the bottom.

On the Continent, in the chalky deposits, tubbing by brick or stone work was common, but the pressure to be encountered was comparatively small. In the rectangular shafts of Westphalia the work had been reduced to a regular system, and the rule followed was that where the pressure or depth was no more than 15 fms. the lining must be 2 bricks in thickness; at 25 fms., 2½ bricks; at 45 fms., 3 bricks; at 55 fms., 3½ bricks; and at 60 fms., 4 bricks. But when they came to brickwork like this it was doubtful whether some other system would not be better. In this country, where the pressure was generally much greater, wooden or cast-iron "coffering" was found to be considerably better; and for lighter pressures, as he had already pointed out, close timbering, well caulked, was capable of keeping out the water. In the circular shafts of the northern collieries, what was called plank tubbing was largely used. In 1804, the system of cast-iron tubbing was introduced by the late Mr. Buddle. The iron was cast in segments, with inside flanges, the thickness varying from ¾ to 1½ inch. A few years ago a mining company in France, of considerable enterprise, attempted a sinking which they knew would be attended with considerable risk. The lining was contrived on the principle of wedging curves; the work was well done, and for some years the shaft appeared to be perfectly secure. About two years ago, however, it was found that the water began to find its way through. The engineer under whose direction the work had been done was sent for, and he at once proceeded down the shaft. He was surprised to find the tubbing gaping in every direction, and after a few hours' inspection he considered the risk to life so serious as to render it necessary all the men should be withdrawn to surface. He and his assistants had next to follow themselves, and very soon afterwards they heard large masses of the lining falling in. The Government engineer was then sent for, to see if anything could be done; but at length a fearful crash was heard below, and the pumps, the engines, the whole of the machinery fell into the shaft, and nothing was left to represent the workings but a sort of chasm, with a crater of several yards in diameter. A great deal of discussion had taken place as to the cause of the failure of the tubbing, and it was supposed to have occurred in consequence of the peculiar position of the coal seam, and of the workings in relation to the shaft; and it had been surmised that a depression must have occurred near the shaft, which thereupon gave way. For fuller information on the matter he referred to an admirable account written by M. Glépin, a well-known mining engineer, who superintended the sinking of the shaft, as well as the putting in of the tubbing. He (Mr. Smyth) only mentioned this case to show the great difficulty connected with this kind of operations, and as an interesting study, both with regard to its singular history, and the means to be used to prevent such catastrophes. He should not, however, dismiss the subject without remarking that wooden tubbing was found to last for a considerable number of years where water ran down the shaft, while cast-iron was apt to be injured by water, and by the products of combustion of the coal burnt in the shaft, so that, after a few years it becomes so deteriorated, as to fail in resisting the action and pressure of the water which it was expected to tub out. Indeed, he had seen cases where the blade of a common knife could be stuck into, or would cut through without difficulty, what had been been hard cast-iron. It, therefore, required continual inspection to protect the workings and the lives of the men employed in them being placed in jeopardy by this deterioration of the iron, letting the water down into the lower works. The question then arose, could not the tubbing be protected against these destructive influences, and several methods to that end had been devised. One of these was to place within the iron tubbing a thin lining of plank tubbing, bevelled to the sweep of the circle, and closely fitted.

This is very effective to some extent, but it had the disadvantage of precluding the possibility of examining the real tubbing, on which dependence was placed for safety. Thin brickwork had been tried, but with the same disadvantage; and, in fact, the result desired had never been satisfactorily attained, and it was a question yet open to further suggestions. Another point he would mention was one which was still *sub judice*, on which a number of experiments had been made without yet obtaining the desired results. This was the advisability or not of connecting the different lengths of tubbing. Thus, if they took the first range of tubbing, it would be that which reached to the surface. The second might protect the shaft from a run of watery ground; and so there might be at intervals, all down to the bottom, separate ranges. The question was whether it would not be better to unite all these, and so equalise the pressure, in which case it would be necessary, as already mentioned, to put in a narrow pipe, to let off accumulations of gases.

MINING NOTABILIA

[EXTRACTS FROM OUR CORRESPONDENCE.]

EBURY.—Although this company has been launched but a few months, it is deservingly attracting no little attention. A great improvement has taken place there during the last week, the lode at the shaft being now worth 2 tons of lead ore to the fathom. This is sufficient, in such easy ground, to make a very rich mine, but even better things are anticipated as the ground is opened out, judging from what has been taken away above. There is a long run of ore ground to the east and west of the shaft.

EAST CHIVERTON is now looking much better in the cross-cuts, and before long holders will be repaid for their outlay. The sett joins Wheal Chiverton, and has been highly spoken of by all practical authorities acquainted with the district.

GREAT SOUTH CHIVERTON continues to look exceedingly well, and from the long run of lead ground passed through in the 30 fm. level there is not the least doubt but that in the 40 a valuable course of lead will be laid open.

LOVELL CONSOLS.—The lode in the new shaft still holds good, worth 12*l.* per fathom. The flat-rods are working well, and when the lode is taken down next week there is every reason to expect a further improvement.

OLD WESTMINSTER.—The lode in the 92 east has just showed its character in a most favourable manner. They had a vein of lead about 3 in. wide, and expected, after driving 5 or 6 fms. more, to get into the rich deposit which made such large returns above the 65. They appear to have got into it before they expected, for as they have pushed on the lode has become richer, and they have now a run of lead above 1 foot wide, and the character of the lode shows that they are rapidly attaining to the possession of the great prize that lies before them. They have, no doubt, an extraordinarily rich and profitable mine.

NORTH LEVANT.—This mine continues to attract the attention of the public, and from the reports and the locality in which the property is situate, there seems little doubt that it will shortly well repay the adventurers.

It is probable that the adventurers of WEST SETON will shortly order one or more of Doering's rock-boring machines, Mr. Loam, jun., who is consulting engineer of the mine, having expressed himself strongly in favour of the machine.

ROSEWALL HILL AND RANSOM UNITED MINES.—A report upon this property has been made by Mr. T. Trewecke, jun., who states that the Carbona at the top of the hill (now called Frank's Carbona), which his father estimated would turn out 13,000*l.* worth of tin, will, in his opinion, turn out much more, the work having much improved in value—in fact it is as likely to turn out 50,000*l.* as 13,000*l.* The excavation is the largest he has ever seen underground; they have 24 men working on it, and 24 more can easily find room to work (provided the stuff can be discharged), and this could be managed. At the 90, east of Ransom, they have driven on a continous course of tin 24 fms. south, averaging 4 to 6 ft. wide, and, judging from the ground broken and the amount of tin sold, must have yielded 70*l.* to 80*l.* worth of tin per fathom; the backs and bottoms of this level are affording the same quality work. The dip of this rich deposit of tin has now been reached in the lower levels—the 100 and 110, there being a good lode in each of these ends, but the tinstone being very closely textured the value cannot be given until a fair sample of the lode has been taken; should these levels turn out anything like the 90, of which there is not the least doubt, we may truly say we have established one of the best tin mines in Cornwall. There is also a good lode in the 100 east, on the Standard, which, it is expected, will hold away to what is called Wheal Mary Troan, 20 to 25 fms. in advance. The tin-dressing department has been completely remodelled by the erection of 11 new round buddles, a new calciner, 16 additional heads of stamps, &c., all of which are at work, so that regular returns of tin of not less than 20 tons per month may be relied on, and the mines being provided throughout with machinery of the best description, whereby the working cost can be conducted upon the most economical scale, a small advance in the price of tin (which must soon take place) will ensure a profit of at least 500*l.* per month. The estimate of the reserves in the mines at 40,000*l.*, he considers, is considerably within the mark. He advises the erection of another 16 heads of stamps, and also the driving of the 120 and 140 fm. level ends, east of Ransom, immediately. Notwithstanding the suspension of the tin-dressing department since August, during the time of alteration, the sales of tin during the year have amounted to 554*l.* 9*s.* 2*d.*

At WHEAL EMILY HENRIETTA there is a very important discovery, the lode in the 60 fm. level east having improved from 20*l.* to 40*l.* per fathom, and the winze in the 50 is in a rich lode. The shaft sinking below the 60 has also materially improved. This virgin mine bears the same position to Wheal Seton as New Seton does to West Seton, and will, doubtless, ere long be a prize: 56 tons of ore was sold last week, realising 275*l.* There are only 811 shares, which are in demand in the neighbourhood at 20*l.*, and no sellers. In Wheal Seton they are driving in the 140 in a rich lode, and are only 2 fms. from the boundary of Emily Henrietta.

GOTHIC MINE has sold another parcel of ore, and, from the report of the agents, the ore ground in the 40 is likely to come up to the estimate formed of its value, and yield from 125 to 150 tons of ore. The sales of ores will soon commence regularly every two months, and the shareholders may congratulate themselves that this mine has every appearance of good results, and that it will be very productive and profitable, and make a lasting dividend mine.

HOLLYBUSH COLLIERY COMPANY.—The strike among the colliers in the district has caused a partial suspension of operations at this colliery, but it may be mentioned that Lord Tredegar's agent has recently inspected the property, and that he estimates the output at 150,000 tons.

LONDON GENERAL OMNIBUS COMPANY.—The traffic receipts for the week ending February 16 amounted to 9836*l.* 0*s.* 3*d.*

Mining Correspondence.

BRITISH MINES.

BEDOL-AUR.—H. R. Harvey, Feb. 20: The 100 fm. level end west, on Milwr lode, remains poor. I have set two men to rise in the back of the 100, on the junction of the St. Vincent and Milwr lodes; the ground is favourable. The ground in the 100 south, on the St. Vincent lode, has much improved, and is looking much more promising for lead. The cross-cut in the 77 has intersected a branch from the lode, composed of clay, with stones of lead. Jones's pitch, in the bottom of the 77, on the Bewil Gwyn lode, is rather poor. T. Jones's pitch, in the 70, on the Brynla, is yielding from 5 to 10 cwts. of ore per fathom.

BOTTLE HILL.—J. Eddy, Feb. 20: The south lode, east of shaft in the 12 fm. level, is producing saving work for tin, and occasionally we find in the lode some rich stones of copper ore. We have also got through and cleared the old men's workings west of the shaft at this level, and the end of ground, where the lode is about 5 ft. wide, composed of gossan, prian, tin, and saving stamps work. I find the lode going west at this depth free from copper or mundic—a very promising lode. I have put six men to drive west, and I believe I shall be able to report of an improvement here in a few days.—Main Lode: Thomas's pitch in the back of the 12, west of new shaft, is without alteration. The lode in Wilmott's pitch, in the back of the 24, is turning out better work for tin at the present time than it has for some time past. The lode both in the 12 and 24 fm. levels is about 5 ft. wide. We have commenced burning our tin, and shall prepare it for market as soon as possible.

BRONFLOYD UNITED.—T. Kemp, Feb. 19: At the 63 the shaftmen have cut out sufficient ground for plat, tackle, &c.; they are now engaged putting in pent-house, which will be completed to-day, and the sinking of the shaft will then be resumed. The stope to the west of cross-cut at the 63 is worth 35 cwts. of ore per cubic fathom. The stope under the 52 is worth about 35 cwts. of ore per cubic fathom. The stopes to the east and west of winze above the back of the 52 are worth on an average 20 cwts. of ore per cubic fathom. In the 40 fm. level end west the lode continues without any change.

CAPE CORNWALL.—R. Pryor, F. Hosking, Feb. 19: There is no particular change taken place worthy of notice since our last report. The 70 fm. level end-men west are now engaged cutting in south, in order to ascertain the full size of the lode, as no south wall has been seen for several fathoms driving, and; looking at the character of the ground in that direction, we are induced to think there is another part still further south, or that we are near the caunter lode.

CARADON AND PHŒNIX CONSOLS.—Wm. Johns, Feb. 20: No. 1 lode, in the 60, west of the engine-shaft, still maintains its regular size, mixed up with a pretty deal of mundic, fluor-spar, blende, and yellow copper ore disseminated throughout. In the 60 cross-cut south, towards No. 2 lode, the ground is a little harder for driving; the stratum of ground is very congenial for mineral. No. 2 lode, in the 30, west of the eastern cross-course, has considerably increased in size, more especially in the bottom of the level, and containing mundic, quartz, and good stones of copper ore—a very kindly lode. After driving a few fathoms further we purpose sinking a winze in the bottom of the level, in order to prove this lode to a deeper point. In the adit level, north of No. 1 lode, we have cut through the lode standing in that direction; it is fully 6 ft. wide, but not containing any ore to value; this end cannot be driven to any advantage without a shaft being sunk from surface for ventilation; therefore we have suspended it. We are forcing on the opening of this mine with all energy for the advantage of the shareholders.

CARADON CONSOLS.—S. Bennetts, Feb. 18: We have just commenced to drive west on the lode at the 78, where it appears in several small veins containing ore: it is about 1 ft. wide. The winze below the 68 is without any material change; lode from 2 to 2½ ft. wide, and worth about 15*l.* per fathom. In the 68 fm. level west end the lode seems to be again improving, and just now it is worth from 6*l.* to 7*l.* per fathom.

CARDIGANSHIRE LEAD.—E. Pearse, Feb. 19: North Lode: The lode in the 40 fm. level, west of engine-shaft, has improved of late, and is producing a little lead ore. The lode in the 40 fm. level, east of the shaft, is poor, and suspended for the present. The stopes in the back of 40 are yielding 1 ton of lead ore per fm. In the 30 fm. level, east of shaft, the lode is getting more kindly, and looks promising for an improvement. The stope in back of 30 west will produce upwards of 1 ton of lead ore per fm.; this piece of ground is turning out well, and we are making preparations for driving on the 20 west, to come in over it, and from present appearances will lay open a valuable piece of ground.—South Lode: The lode in the 40 fm. level, is from 6 to 8 feet wide, producing sulphur, and a little blende, and a great quantity of water is issuing from the end; this lode has greatly improved of late. The dressing and other surface work is going on satisfactorily. We shall sample 20 tons of lead ore one day this week.

CEFN BRWYNO.—J. Paull, Feb. 18: In handing you my report on this mine, I have to inform you that the lode at the 92 fm. level east has been rather disordered for the last few days by a soft cross-joint, which is now being cut through, and the lode is again improving, yielding 1 ton of lead ore per fm. The same level, west of shaft, is in a very promising lode, producing good stones of lead ore, and likely to improve, as we shall shortly get under the good runs of ore ground seen gone down in the level above. The 80 fm. level east is in a lode 4 feet wide, of a very promising character, containing spar, blende, carbonate of lime, and clay-slate, with good branches of lead ore, yielding 10 cwts. of the latter per fm. The lode at the same level, west of shaft, is 7 feet wide, intermixed throughout with strong spots of lead ore. The cross-cut north at the 20, is being urged on to intersect the north lode as quickly as possible. The mine, on the whole, since the commencement is opening out satisfactorily. The machinery is in good working order.

CHANTICLEER.—Wm. Wasley, Feb. 19: The lode in the end of the 110 yard level, driving west of shaft, is still about 2 ft. wide, composed of clay, spar, &c., and is producing some fine lumps of ore, and likely for an improvement shortly.

CHIVERTON.—J. Juleff, J. Borlase, Feb. 20: Cookney's shaftmen are now engaged cutting tip-plat in the 120 fm. level. In the 120 west the lode is large, and opening tribute ground. In the 120 east we are cross-cutting to the north part of the lode. The 110 is driven east of Murray's 5 fms., and cut through the cross-course; and in the end we have a good looking lode, which is about 2 ft. wide, producing good stones of lead. In the 110 east the lode is at present small and unproductive. In the 78, east of the old engine-shaft, the lode is 2 ft. wide, composed of quartz and mundic. There is a good looking channel of clay-slate in the 78 fm. level cross-cuts, north and south of the old engine shaft.

COLQUITE AND CALLINGTON UNITED.—T. Doidge, Feb. 20: Colquite Shaft: We have lost no time in the erection of the horse-whim, which will be completed this week, and the sinking will be proceeded with on Monday. The lode in the 20 fm. level, driving towards Colquite, is nearly as last reported, but as a stream of water is now coming from the back we may hope that Colquite shaft will soon become dry, and thus facilitate working.

CUDDRA.—F. Puckey, A. Cundy, Feb. 19: In the 142 fm. level, 18 fms. west of Walker's shaft, we cross-cut the lode 5 feet, and found it good for tin, worth 30*l.* per fm. for that width; we thereupon put six men east and six men west of the cross-cut, to cut out the lode. On the west thereof the tin part of the lode on being taken down 2 fathoms entirely spliced out. On the east thereof the tin part is 6 feet wide, and worth 20*l.* per fm. for that width, and of which upwards of 2 fms. have been taken down. At the splice we shall at once commence to drive north through the gossan, to find the corresponding part of the lode, which we expect to be equally good as the lode was before it spliced out. The 130 fm. level is driving by the side of the lode, ground favourable for progress. The end is being pushed on with all possible speed to get under the tin ground gone down from the level above. The two stopes in the back of the 130 are each worth 10*l.* per fm. At the 100 fm. level, west of Walker's shaft, we have one stope working in the back, where the lode is 12 feet wide, the north part of which, for 6 feet, is worth 25*l.* per fm. In the east of the above stope we have made preparations, and shall commence another stope next week, where we expect the lode will be equally good, as it is in that stope.

DEVON AND CORNWALL UNITED.—Thos. Neill, Feb. 18: At George and Charlotte, in the cross-cut north the ground is more favourable for progress.—William and Mary: The lode in the 34 east is still looking very promising, and worth from 1 to 2 tons of ore per fathom; water is coming fast from the end. This level (34) has drained the eastern shaft 6 fathoms. The lode in the 34 west is producing stones of ore. The lode in the 22 west is looking very promising, worth 2 tons of ore per fathom; ground more favourable for progress. The pitch in back of this level is worth 5 tons of ore per fathom. We have two other pitches, in which the men are getting wages.

EAST CHIVERTON.—R. Southey, Feb. 19: There is a very great improvement in the 25 west, on No. 1 lode; lode 1 foot wide, with fine stones of silver-lead, blende, and mundic, underlying south 1 foot in the fathom. This favourable change is about 12 fathoms east of where we had lead in the 12, which plainly shows the bunch of mineral lengthening in depth; ground favourable for driving—driving by four men, at 30*s.* per fathom. The 25 fm. level cross-cut north is still in the same kindly channel of ground for lead, and letting out a large quantity of water; driving by four men, at 2*l.* per fathom. No other change since our last.

EAST GUNNISLAKE.—James Bray, Feb. 20: During the past week we have gone through a very pretty branch of yellow ore in the 54 fathom level cross-cut south, which is about 4 fathoms big. We continue to drive the cross-cut, and hope to meet with the main part of the lode. The lode in the winze sinking under the 46 is of the same size and character as when last reported on, still producing good stones of ore. We shall finish clearing the mud and stuff from the sink under the bottom of the 46 to-day, and shall at once put the men to carry a stope over the bottom of the same, so as to ascertain its size and value. The 36 fathom level cross-cut south is without change to note. The lode in the shallow adit continues large, and carries some very nice looking strings of black ore—it is altogether a very kindly lode for improvement.—Impham Lode: The end on this lode continues to yield 6 tons of ore per fathom.

EAST ROSEWARNE.—C. Glasson, Feb. 20: In King's shaft, sinking below the 105, the lode is 15 inches wide, worth 10*l.* per fathom. In the 105, west of shaft, the lode is very much the same as reported last week, 12 in. wide, producing stones of copper ore, but not enough to value. In the 105, east of shaft, the lode is 16 in. wide, worth 6*l.* per fathom. In the 90, west of shaft, the lode is 15 in. wide, worth 6*l.* per fathom, and letting out more water than usual. In the 95, east of shaft, the lode is 16 in. wide, worth 4*l.* per fathom. In the 85, west of shaft, the lode is 10 in. wide, worth 7*l.* per fathom.

EAST SNAEFELL.—W. H. Rowr, Feb. 18: Very little change this week. I have set the shaft to sink at 26*l.* per fm., and the stopes in the roof of the 15 at 2*l.* 5*s.* and 3*l.* 15*s.* per fathom respectively.

EAST WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Feb. 15: the lode in the 110 west is 2 feet wide, producing copper ore and tin to the value of 10*l.* per fathom—a very promising lode; here we have placed the men to rise against the winze sinking below the 95, which we hope will be done this month, and thereby open out a good piece of ore and tin ground. The lode in the winze sinking below the 95 west is 2 ft. wide, and worth 2½ tons of copper ore per fm., with good work for tin on the north side of the lode. All the other places are looking much the same as when last reported.

EAST WHEAL ROSE CONSOLS.—J. Evans, Feb. 18: The new shaft is completed to the adit level, and commenced to sink below the level to intersect No. 1 lode. There is also a cross-cut started south to intersect No. 2 lode. The stratum is highly mineralised, and if the lodes are found to be well defined, I have not the least doubt you will open up a profitable mine here.

EAST WHEAL RUSSELL.—W. Richards, Feb. 19: We have suspended the winze in the 66 for the time, and put the men to stope east of said winze for next sampling. The ground in the 88 cross-cut is improving, and becoming more mineralised, with branches of mundic and yellow copper ore as we advance towards the lode. The ground in the other cross-cuts is also favourable for mineral, and will push them forward to prove the objects in view as early as possible.

EBURY.—F. Evans, Feb. 17: As reported, we have had a good branch of ore in the shaft; it has been improving as we sink. Lately there has been a large "loch" or cavity in the lode, which has produced loose stones of ore, besides a branch of lead on the hanging side of the vein; to-day we broke a large stone of ore of about 3 cwt.; this came from the bottom of the "loch," and where it is thought the lode may be solid, and would lead anyone to suppose a regular leader of ore was coming in. We shall see more of it in two or three days, as we shall have to sink a little deeper into it before giving a correct description. I do not think I overate it at the present moment by calling it worth 2 tons per fathom; but, of course, as I said before, more definite information can be given you upon it in a day or two.

GAWTON COPPER.—G. Rowe, G. Rowe, jun., Feb. 15: We have to-night communicated the rise in back of the 70 with the winze sunk below the 60, and shall have the ground all squared down in a few days, after which the ends both east and west in the 70 will be in active operation on the course of the lode; meantime preparations will be made for cutting a trip-plat and sinking the engine-shaft to obtain a deeper level. The lode in the 60 east is worth 2 tons of ore per fathom. The lode in Spare's stope, in the back of the 60, is worth 3 tons of ore per fathom. The lode in Vinet's stope, in bottom of the 50 fm. level, is worth 2¼ tons of ore per fathom. The lode in Adams's stope, in back of the 50, is worth 2 tons of ore per fathom. The lode in Sprague's stope, in the back of the same level, is worth 4 tons of ore per fathom. The lode in Cove's stope, in the back of the 50 east, is worth 3 tons of ore per fathom. The lode in the stopes west of rise, in the back of the old sump, is worth 2 tons of ore per fathom. The lode in the 40 east is unproductive. The lode in Beer's stope, in the back of the 36, is worth 4 tons of ore per fathom. All other operations, both underground and at surface, are progressing very satisfactorily. We are now busily engaged in cleaning the engine, boiler, &c., which will occupy some 15 hours to accomplish.

GOTHIC.—J. Williams, Feb. 20: We have sent to Aberystwith the rest of the parcel of ore you sold to Messrs. Sims, Willyams, Neville, and Co. The east stope looks very well, and is yielding about 18 cwt. of lead ore to the fathom. I have put four men to-day to make a borer-hole from the rise to the winze, and to get the water from the winze; four men to drive in the 40 fm. level; and the others to stope east, as before. We have finished the slime pits, and the girls are going on dressing ore. I am going for the iron and timber to Aberystwith.

GREAT NORTH DOWNS.—William Rich, Cornelius Bawden, Feb. 19: Sleggan's shaft is being urged on by 12 men as rapidly as possible; we are sinking in the country, entirely to the south of the lode, and hope now to make better progress. The lode at King's shaft, sinking below the 74, has a very promising appearance, and is worth 6l. per fathom towards the eastern end of the shaft. At Vivian's engine-shaft we are carrying down ground in sinking for bearers and cistern; the south part of the lode is looking more promising than heretofore. The ground in the 74 end, west of Sleggan's, is easier for driving; the lode is just the same in value as when reported on last week—8l. per fathom. The winze below the 59 west is worth 10l. per fathom. We have cut through the lode in the 54, west of Butler's shaft, which is fully 12 ft. wide—a strong, kindly lode; we are now driving west on the south part of it, which carries mundic, friable spar, and spots of ore. The 64 west is being driven on the north part of the lode, and yields stones of ore. The 64, east of Butler's, is worth 12l. per fathom. Two stopes in back of this level are worth 8l. and 12l. per fm.

GREAT RETALLACK.—G. R. Odgers, J. Harris, Feb. 15: No. 1 Lode: The lode in the 10 south is 2½ ft. wide, composed of quartz, and stones of silver-lead.—No. 2 Lode: The lode in the 20 south is 18 in. wide, composed of friable quartz and white iron, and containing stones of lead. The lode in the 20 north is 3 ft. wide, composed of quartz and iron—a strong lode, and letting out an increase of water. All the other places are the same as last reported.

— G. R. Odgers, J. Harris, Feb. 19: No. 1 Lode: Whilst the water is being foked we have put the men to drive the 10 fm. level south, where the lode is altogether 3 feet wide, with branches of spar containing stones of silver-lead.—No. 2 Lode: We are glad to tell you that everything is working satisfactorily. The lode in the shaft sinking below the 30 fm. level is 18 in. wide, and worth from 3 to 4 cwts. of silver-lead per fm., a very promising lode. The lode in the 30 south is 15 in. wide, composed of friable quartz and stones of silver-lead. The rise above this level is worth fully 10 cwts. of silver-lead per fm.—a good lode. The lode in the 30 fm. level north is 3 ft. wide, composed of white iron and friable quartz, with good silver-lead, worth from 4 to 5 cwts. per fm. The stope above this level will produce 5 cwts. of silver-lead per fm. All the other places the same as before reported.

GREAT SOUTH CHIVERTON.—J. Nancarrow, John George, Feb. 14: The 20 east looks much better. There is a lode 1½ ft. wide coming into the end from the south running north-east, which contains a good deal of flookan, carbonate of lime, mundic, and has a most promising appearance for lead. The ground in the rise above the 30 is improving. There is some very good lead in the 30 fm. level end west, and the lode looks as if it would become valuable. The ground in the 40 and 50 is just as it was last week. The 50 east is favourable for driving. The prospects throughout the mine are very encouraging.

GREAT WHEAL BADDERN.—R. Pryor, H. Tregoning, Feb. 15: We have to-day set the following bargains:—The 75 fm. level cross-cut, to drive south of Hill Brothers engine-shaft, by six men, at 17l. per fathom; the end is still in the Great Wheal Baddern elvan-course, and is letting out an increased quantity of water, which indicates that we are close on to the tin lode, but the extra quantity of water makes it spare for driving. The 75, to drive west of the cross-cut, on the Baddern lead lode, by six men, at 4l. 10s. per fathom, in a lode 2 ft. wide, composed of mundic, flookan, and spar, with spots of silver-lead; the extra quantity of water coming from this and the 75 fm. level cross-cut has increased the working of our engine over a stroke per minute; the character of the lode in this end is all that can be desired, except a course of lead, and the lode is still embedded in a beautiful elvan-course.

GREAT WHEAL YOR UNITED.—T. Julian, S. Harris, J. James, H. Julian, Feb. 19: The Metal engine-shaft is sunk about 6 ft. below the 216, sinking by eight men; the ground is favourable for sinking. The 216 fm. level cross-cut is driving north by eight men, driven about 15 ft.; the ground is hard. The lode in the 204 fm. level end west has fallen off much in value, by reason of some floors of mundic crossing it; the lode is regular, and about 2 ft. wide, worth 20l. per fm.; there is, however, a prospect of an improvement, as the mundic floors are wearing out, and the ground becoming more favourable; this end has been driven about 26 fathoms from shaft, the last 6 fathoms driven have produced over 15 tons of tin, and left both in the back and bottom of the level a lode equally valuable. The 124 has been driven about 57 fathoms west from shaft; the lode in the end is about 2 ft. wide, worth 10l. per fathom. The 194, driving back of the north part, is driven about 7 fathoms; the lode now in the end is 18 in. wide, worth 20l. per fathom. We propose next month to set a winze in the bottom of this level to prove the lode, and ventilate the 204 below. The 194, west of cross-cut, north part, has been driven about 4 fathoms; in this end the lode has been small, and rich in tin; we have not been able to drive it for the past fortnight from the accumulation of stuff; it is now being cleared out, and resumed; the ground is becoming more favourable for driving, and the lode larger, now worth 12l. per fathom. We also propose driving east at the 204, on the south part, to communicate with No. 2 winze, on the south part, in the 194; this end has also been suspended, from accumulation of stuff, and now will be cleared up. All the stopes in this part of the mine are yielding their usual quantity of tin, and the skip-road working exceedingly well. Ivey's engine-shaft is sunk about 3 fathoms below the 194; we have not taken down any of the lode since we have resumed the sinking; the lode has been more perpendicular than the angle of the shaft, we must leave it to the south for the present; it must, therefore, be valued as before—50l. per fathom. The 194 west has been driven about 9 fathoms from shaft; the lode in the last 9 ft. has been gradually improving, now about 2 ft. wide, worth 45l. per fathom. The 194 east has been driven about 7 fathoms from shaft; the lode is about 18 in. wide, poor for tin, worth 12l. per fathom. The 174 has been driven about 53 fathoms from shaft; for several fathoms we have had a lode about 2 ft. wide, of a very promising appearance, producing tin, but of low produce stuff; the lode now in the end is 2 ft. wide, worth 12l. per fathom. The 162 has been driven about 61 fathoms from shaft; the lode is about 3 ft. wide, worth 20l. per fathom. The 157 has been driven about 88 fathoms from shaft; within the last 2 fathoms driving the lode has improved in size and appearance, now about 1 ft. wide, but poor for tin. All the stopes in this part of the mine are looking very well, and the skip-road in good order. The shaftmen are now engaged fixing plunger-lift at the 194, which will be completed in a few days, when we shall be enabled to sink the shaft with greater speed. Edward's shaft is sunk to the 114, and cross-cut commenced south towards the lode; if there be no material change in the underlie of the lode we expect to reach it in about 9 ft. driving, which we expect will be accomplished by next setting-day. The 102 is driven east on the lode from shaft about 6 fathoms; the lode has been about 2 ft. wide, producing excellent stones of tin, and so far proved very bunchy; the lode now in the end is about 2 ft. wide, and producing good stones of tin, worth 7l. per fathom. We are anxiously looking forward to a more settled bunch of tin at the 114. All the machinery on the mine are in a good working order.

GWYDYR PARK.—Wm. Smyth, Feb. 18: There is no particular change in cross cutting south at Gwyn Lliflon. In Gwydyr the lode looks a little more regular than when last reported on, and still yields saving work for lead ore.

HARWOOD.—J. Race, Feb. 14: There is no alteration of importance in the end of the level going north at Scar Head. The end of the drift east in North String is worth about 6 cwts. of ore per fathom. The stope in the back of this drift is worth 16 cwts. of ore per fathom. We are rising in the vein at the back of the old men's cross-cut, and are nearly up to the middle plat. We have advanced 30 fms. on the old level towards Trough this week, and shall soon be through. We have 24 sons of ore on the floors.

HINGSTON DOWN.—T. Richards, Feb. 19: The boiler has been thoroughly repaired. The engine is working well, and the water will be pumped out with as little delay as possible.

IMPERIAL.—Captain Richards, Feb. 19: In the cross-cut west, towards the lode, we continue to meet with branches of quartz; the stratum between them is of a very favourable description for deposits of metallic mineral.

MAUDLIN.—John Tregay, Jan. 15: West Mine, New Lode: The lode at present time produces a large quantity of quartz, and also spots of mundic and copper ore. In the flat-rod shaft the water is not quite in fork.—New Lode East: This lode is looking well, composed of beautiful gossan, quartz, and spots of copper ore.

MINERA UNION.—W. T. Harris, Feb. 19: Low's Shaft: The lode continues to yield a little lead, and very promising. By the end of this week I calculate we shall be deep enough for cutting lodge, &c.—Williams's Shaft: The 40 yard level north is making good progress, and yielding a slight quantity of lead. The stopes in the back are worth 10 cwts. of lead per fathom; the pitch in bottom of this level is worth 10 cwts. of lead per fathom. All other points the same as last reported.

MOUNT PLEASANT.—W. Wasley, Feb. 20: Last Saturday being our monthly setting-day, I set to eight men to drive the 120 yard level, north of Jenkin's shaft, at 20s. per yard for the month, the men to fill and land all the stuff, and to pay for drawing and all other costs. The end is now 20 yards from the shaft, the ground in which looks very favourable for the production of ore. At our present rate of driving we shall get under where they got the great runs of ore in the upper levels in about eight or ten weeks more; but from the favourable surface formation, together with the kindly appearance of the ground in the end, we may reasonably expect to get other good runs of ore before getting under where they got the great runs in the upper levels.

NETHER HEARTH.—Wm. Vipond, Feb. 15: We have a slight improvement in the stope east on Henry's vein, otherwise there is no change. We have got on well with dressing ore this week.

NEW PEMBROKE.—Feb. 20: We have a good improvement in our bottom level in the 75 end east. The lode is now cut through, and is from 5 to 6 feet wide—a lode of great promise, and worth for tin 20l. per fathom. This fully bears out the agent's former statement, that the lode improves as we go deeper.

NEW BAMPFYLDE (North Molton).—Capt. Pope, Feb. 18: We have cut into the lode in the 102 about 4 ft., but no north wall yet; there is soom good stones of ore in it, but not so good as we had hoped to have seen, yet the appearance of quartz is very favourable, and we have no doubt but there is good ore at no great distance from this place, as we have always found it so where we have had this sort of quartz before. The lode appears to be a little split by cross branches where we are cutting into it, and we have no doubt this will account for there not being more copper here at present: we believe when we come to open on it we shall find it better. The 90 west is without change to name. No. 1 stope east, in the back of the 90, is rather poor, and we have suspended it for the present, and put two men in the cross-cut south in the 102, and the other two in the 40 south, in No. 5 cross-course, making four men here. In the end in the 80 west we have cut another cross branch, which has thrown the lode north again; we have removed two of these men, and also the four from No. 1 stope, west of No. 5 cross-course, as the lode is poor here at this time, and put them to sink a winze below the 90, about 2 fathoms east of No. 4 shaft, as the water is drained from here by cutting into the lode in the 102, and we have put the six men here to push it down as fast as we can. No change at any of the other parts to name since last report. We hope to get out the water from the winze on the north lode by the end of the week.

The following statement shows the present position of the company:—

Copper ore sold			£ 648	0	0	
Copper ore on mine			1244	0	0	= £1892 0 0
Liabilities per tributers, say 50l.; ditto royalties, 115l.; ditto loans, 420l.; ditto sundries, 120l.			705	0	0	
Net balance in hand in copper ore				1187	0	0
Cash paid for plant, machinery, lease, &c.	£2386	0	0			
Excess of working costs over receipts since October, 1867*	427	0	0	= 2813	0	0
Capital paid				£4000	0	0

* Caused by unfavourable changes in lodes, increased expenses of deeper workings, low prices of copper, and recent additional explorations.

NEW CROW HILL.—Wm. Trelease, Feb. 18: The winze below the 70 is progressing favourably, considering that the ground continues very stiff, and the water hinders a little. The stope over the Midway level, in the old winze below the 55, is producing stones of lead only as yet, as we are not yet up to the orey part of the lode here, or not so high as where the lode will pay for taking away. The 22 fm. level cross-cut is going on well, and I fancy we ought soon to see some signs of our approaching the lode here. No. 1 stope, above the 35, is still showing a good lode in places, worth here and there 25l. per fathom. No. 2 is also showing a fine lode in places, also worth here and there 25l. per fathom.—Wheal Louisa: The shaftmen here are making fair progress with the sinking below the 60, and I suppose they will be deep enough for bearers and cistern in the course of another week. The lode in the 60 east end was taken down again yesterday. We have decidedly a very strong lode here, but we must get forth 6 ft. further before we shall be able to see what effect the great thing from the south is likely to produce on the orey part.

NEW TRELEIGH.—S. Micheil, Feb. 19: The men are making fair progress in sinking the new shaft below the 70 fm. level. I think that we are near the cross-course in the 70, west of the shaft, as the men last night met with an additional flow of water; there is a good branch of ore in the end towards the bottom, and shall soon be under the ore gone down in 60 fm. level, west of the cross-course.

NEW WHEAL TOWAN.—R. Pryor, Feb. 19: The lode in the adit level, driving west, is presenting a better appearance, and is similar in character to that in the deep adit level. This end was set again on Friday last to four men, at 5l. 5s. per fathom, and will be pushed on with all possible speed to communicate to the deep adit level.

NORTH DOWNS.—F. Pryor, J. Grenfell, Feb. 18: Setting Report: The 85, to drive west of King's shaft, by three men and three boys, at 8l. 10s. per fm.; lode unproductive. The 60, to drive west of this shaft, by three men and three boys, at 5l. 15s. per fm.; lode worth 18l. per fm. A rise in the back of this level to communicate with the winze sinking below the 50 by six men, at 6l. per fathom; lode worth 5l. per fm.; this is just where we first cut the ore in this level (the 60). A stope in the back of the 60 by six men, at 3l. per fm., worth 12l. per fm. The 50, to drive west by four men, at 7l. 5s. per fm.; lode worth 8l. per fm. A winze to sink in the bottom of this level by six men, at 7l. per fathom, worth 10l. per fm. A stope in the bottom of this level, east of the above winze, by six men, at 2l. 15s. per fm., worth 16l. per fm. A rise in the back of this level by four men, at 8l. 10s. per fm., worth 6l. per fm.; this rise, though not rich, will open ground which will work on tribute, and shows that the ore is still likely to make up in the killas. The 40 to drive west, by three men and three boys, at 5l. 5s. per fm.; lode small, but producing stones of ore. The 50, to drive west from point of horse in the south branch, by four men, at 6l. per fathom, worth 12l. per fm.; this is about 40 fms. west of King's shaft. The ore sold on Thursday last weighed off 124 tons 10 cwts. 2 qrs., realising 821l. 11s.

NORTH PHŒNIX.—J. Seccombe, J. Martin, Feb. 14: Setting Report: The 160 to drive west in the killas, on the south side of the lode, by six men, at 9l. 10s. per fathom; the ground is not quite so favourable as it was. The 140 to drive west by six men, at 7l. per fathom; the ground here is improved, and lets out water more freely than for some time past. To drive the No. 5 fm. level cross-cut into the lode from the 140 west by six men, at 12l. per fathom.

NORTH RETALLACK.—G. R. Odgers, J. Harris, Feb. 19: We are proud to tell you that the water is to-day 9 feet below the 10 fm. level, on the No. 1 lode, and we hope shortly that we shall be enabled to resume the sinking of the No. 1 boundary shaft. In the meantime we shall continue the 10 fm. level north on this lode towards the junction.

NORTH TRESKERBY.—R. Pryor, J. Tregoning, T. Jenkin, Feb. 20: The lode in Tresidder's shaft, sinking below the 130, is 4 ft. wide, worth for tin and copper 5l. per fm.—a kindly lode. The lode in the 130, east of shaft, is 3 ft. wide, and at this mine a little disordered, but the end is letting out a quantity of water, which is a good indication. The lode in this level, west of shaft, is 3 ft. wide, and worth 1 ton of copper ore per fathom. The lode in the 120 fm. level end, east of shaft, is 3 ft. wide, and worth for tin and copper 10l. per fathom. The three stopes in the back of this level are worth on an average 12l. per fathom. The lode in the 110 east is 3 ft. wide, and producing stones of copper ore; the end is letting out water freely, and the appearance and character of the lode in it are good. The lode in the 100 fm. level end east is 3 ft. wide, and producing 1 ton of copper ore per fathom. The lode in the winze sinking below this level is 2½ ft. wide, and producing 2 tons of copper ore per fathom; this winze is 6 fathoms in advance of the 110 fm. level end. All other places without change.

NORTH WHEAL CROFTY.—J. Vivian and Son, W. Thomas, jun., Feb. 20: The levels west of the engine-shaft continue to produce tinstuff of low quality. In the 196, east of Praed's shaft, we are at present driving on the flookan part, and shall take down the prian part of the lode next week. In the 183, east of Praed's shaft, the lode is worth about 40l. to 50l. per fathom. About 3 fathoms behind the present end we are taking down the south part of the lode, which produces good tinstuff. The tin stopes are looking very well.

NORTH WHEAL ROBERT.—W. Godden, Feb. 20: There is no material alteration in the lode in the 62 end east, except that the two ore-bearing parts, one on the north and the other on the south, are converging towards each other, and may form a junction in about 2 or 3 fathoms further driving, where a change of considerable value may occur.

OKEL TOR.—J. Rodda, Feb. 20: South Lode: In the 80 east the lode is very large and promising. I cannot give the size, as there is a part of the lode standing on each side of the level. The water, which has much increased within the last two days, is principally coming from the south; we are, therefore, gaining in this direction as we proceed with the drivage, believing the main orey part of the lode is on the south wall, as is the case in the level above, where there is a good shoot of ore for a great many fathoms long, and the 80 will very soon be under it. The lode in the 65 west has been small during the past week, but is opening out again and improving; now worth 2 tons of ore per fathom. We have two stopes in the back of this level, producing 4 tons of ore per fathom each, and two other stopes producing from 2 to 3 tons each. The lode in the 65 east is producing good stones of ore, and looking promising to improve. The lode in the 50, east of Bickle's cross-cut, continue to yield 1 ton of ore per fathom. Geake's stope, in the back of this level, west of the cross-cut, will yield 2 tons of ore per fathom.—North Lode: The stope in the back of the 80, west of Reynolds' winze, will yield 3 tons of ore per fathom. The stope east of this winze is rather poor, and the men are removed to stope the bottom of the 65, on the intermediate lode. Wilton's stope, in the back of the 65, west of Toll's winze, will yield 2½ tons of ore per fm.; and the level driving west of the footway winze, in back of the 65, will also yield 2½ tons of ore per fm.; this level is driving to communicate to Wilton's old pitch, to make advantage for stoping, and there is about 6 ft. to drive more to hole.

OLD WESTMINSTER.—F. Evans, Feb. 19: The lode in the 92 east is still improving, particularly on the footwall, and will produce 1 ton per fathom. The two bargains behind this end will produce each ¼ ton and 1 ton of lead ore per fathom. There is no change to report in Nos. 1 and 2 sumps; let, as I last reported, at 8l. per ton. We are getting on as fast as possible with the work for No. 3 sump, but there is a good deal to do before we shall be able to put down the pumps and work on the main deposit of ore going east from that sump. I have no doubt this ore ground will become of great value as it is fairly opened out. The sinking of Carpenter's shaft is being proceeded with rapidly.

PEDN-AN-DREA UNITED.—W. Tregay, J. Thomas, E. Chegwin, Feb. 15: Sump: In the 140 west end the lode is worth 14l. per fm. In the 130 west end the lode is worth 10l. per fm. In the 120 west end the lode is very large; the part carried is 6 feet wide, worth 12l. per fm.; at present we have neither north or south wall. In the 100 east rise the lode is worth 14l. per fm.—Cobbler's Shaft: The lode at bottom of this shaft, sinking below the 120, is worth 6l. per fm. In the 110 east end the lode has been producing some rich stones of tin during the week, and promising improvement; present value 7l. per fm. In the 110 west rise the lode is worth 12l. per fm. In the 90 north cross-cut, we have intersected a branch beyond which the ground seems easier for driving, and letting out much water. No other changes to report in the points of exploration, but the tribute pitches have somewhat improved during the week.

PENHALE WHEAL YOR.—W. H. Martin, Feb. 19: No alteration in Hollingsworth's engine-shaft, or in the rise in back of the 38, since last advised. We are in fork to the bottom of the 50, at Holroyd's shaft, and have found the top of another lift, and the men are preparing to drop below this level. I have been in the 50, and the stuff and slime prevented my having a thorough examination. By next report I shall be able to state more particulars about this level. We have cleared and secured the 40, and are now engaged clearing the bottoms, and I anticipate finding some tin ground here. So far as cleared I am quite satisfied there is tin. We have two pares of tributers working in back of this level. The tribute department, on south lode, is not looking quite so well.

PRINCE OF WALES.—Capt. Gifford, Feb. 20: In the 65 fm. level cross-cut south we have cut through the north part of the lode, and we are continuing driving south, the lode being composed principally of capel, quartz, killas, mundic, and copper ore intermixed, and we are of opinion the main part of the lode is further south, as all the water is coming from the bottom of the end, but not enough to effect the coming stream in the level above. In the 55 east we are taking down the lode; so far as seen it is 6 feet wide, and worth full 70l. per fathom—a splendid lode. In the 55 west we are driving on the south part of the lode, 6 feet wide, which is daily improving; now worth 20l. per fathom. In the 55 cross-cut north the ground is favourable for driving, and the water coming freely from the end. In the 45 east the winze in bottom of this level is worth 30l. per fathom; lode 3 to 4 feet wide. In the 45 west the winze in bottom of this this level is worth 20l. per fathom. Two stopes in back and 55 east are worth 20l. per fathom each. The stope in back of the 55 west is worth 25l. per fathom. We are getting on well with our sampling, which will be about the same quantity as last.

PRINCESS OF WALES.—G. Rickard, Feb. 20: Saturday last being our monthly setting and pay-day, the north adit was set to drive towards the south lode, by six men, at 3l. per fm., stent 6 fms., and the men are making good progress. We have extended the costeaning from our eastern boundary westward 200 fms. on the backs of the north and south lodes, and find them varying from 4 to 6 ft. in width, of the most promising appearance, producing some very rich looking gossan, with soft friable spar, spotted with black and yellow copper ore. More promising lodes cannot be seen at surface, which augurs well for deeper levels. The foundations for the smiths and carpenters' shops are being taken out, and masons will commence building same forthwith. In clearing out saw-pit we have intersected a small cross-course, about 9 inches big, composed principally of spar, and very congenial for making a productive lodes as it plainly appears by the extensive workings of the ancients.

PROSPER UNITED.—John Nicholls, Feb. 20: The lode in the 100 east is 5 ft. wide, worth 12l. per fathom for tin. The stope in back of this level is worth 10l. per fathom for tin. The 100 west is unproductive. The 90 fm. level rise is producing saving work for tin. The 80 is without change. The stope in back of this level is worth 7l. per fathom for tin. The 70 east is producing good stones of ore, and looking promising. The 60 east is without change. The winze in bottom of this level is producing 2 tons of ore per fathom. The stopes in the back are producing 2 tons of ore per fathom. The 50 east is producing occasional stones of ore. The 25 east is producing stones of ore. The 25 west is producing 1 ton of ore per fathom. No change to remark on in any other part of the mine.

REDMOOR.—T. Taylor, Feb. 20: The south cross-cut at the 64 is a little harder, and letting out more water. In the cross-cut north we have a deal of spar, mixed with mundic, &c. We have men opening on and tracing by costeaning the lode in the western part of the sett; it contains mundic, spots of copper, blende, spar, &c., a very kindly lode at surface. I hope this will throw some light on our cross-cuts.

ROARING WATER.—Henry Thomas, Feb. 18: I expect the contract alluded to in the last week's report will be completed at the end of this or the beginning of next month, when the shaft will be resumed with vigour. The ground in cutting the plat is very much mineralised.

ROSECLIFF AND TOLCARNE.—R. Pryor, T. Gundry, Feb. 19: The following bargains were set on Friday last:—The 50, to drive east of cross-cut, on No. 3 lode, by six men, at 3l. per fm.; lode large, and producing good stones of lead; this level to drive west of cross-cut by two men, at 2l. 10s. per fathom; this end is not yet clear of a small flookan which has been met with in the last few feet driving. The winze to sink below the 30, on No. 4 lode, by six men, at 4l. per fathom, in a lode 2½ ft. wide, which is producing 2 cwts. of lead per fathom. Our object will be to push on the 50 fm. level end east to reach the great cross-course, and when cut through will drain the old engine-shaft.

SORTRIDGE.—R. Jackson, Feb. 20: Hitchins's engine-shaft is in regular course of sinking below the 140; the ground is favourable and congenial for mineral. In the 140, west of the shaft, no lode has been taken down this week. In the 140, east of the shaft, the lode is 2½ ft. wide, composed of spar, prian, mundic, and good stones of copper ore. There is no change to notice in any other part.

SOUTH CONDURROW.—J. Vivian and Son, Wm. Williams, Feb. 15: In the 82, east of King's shaft, the lode is 3 ft. wide, composed of quartz and flookan, with stripes of black copper ore. In the same level west the lode is 3½ ft. wide, composed of quartz and iron, impregnated with grey copper ore. In the 70 fm. level east the lode is 1½ ft. wide, composed of quartz and copper ore. In the same level west we are at present cross-cutting south towards the main part of the lode, and are in 9 ft. from the part first driven on. In the 60 cross-cut, north-east of King's shaft, the ground is favourable for driving, and we expect to intersect the middle lode in about a month. In the cross-cut south of the 60, west of King's shaft, we are still cutting through the lode, having already passed through 3 fms. of lode and granite mixed, without having yet cut the south wall. Old Tye shaft has been completed to the 51, and as soon as plat has been cut, which will be in a few days, the said level will be pushed on vigorously eastward, in order to explore as quickly as possible the ground in that direction, where there seems to be a probability of making discoveries of value, the lode in the end being of a very congenial character for copper, and producing rich lumps of black and grey copper ore. Vivian's shaft has been communicated with the 51, and in the end of the said level, now about 9 ft. west of the shaft, the lode is 2½ ft. wide, very kindly in appearance, and producing rich lumps of copper ore. In sinking under the 30, west of Vivian's shaft, we are down 2 fms., where the lode is 2 ft. wide, composed of chlorite, muudic, and copper ore. The tin stopes, in back of the 61, west of King's shaft, are producing tinstone of rather low quality.

SOUTH DARREN.—J. Boundy, Feb. 15: We have again taken down the lode in the 60 west, which we are pleased to say is further improved, now worth for lead and copper ore 28l. per fm., with a very promising appearance. In the 50 west no lode has been taken down this week, which remains as last reported. The other parts of the mine are without alteration. We sampled on Thursday last 30 tons of silver-lead ore.

SOUTH FOWEY CONSOLS.—F. Puckey, Feb. 17: Our operations have been very much retarded by the late severe weather, and, in consequence of the increase of water from the late rains, we have deemed it expedient to suspend the sinking of the engine-shaft until the water-wheel can be put to work, as from the increased water it is now too expensive to be kept by horse or manual labour. The masons are getting on as rapidly as possible in building the wheel-pit, &c., and should the weather continue favourable, I hope they will complete the building of the same in about a fortnight from this time. In the meantime, we are making good progress in cutting the necessary leats, &c., and all our surface operations are now pushing on as fast as possible.

SOUTH HERODSFOOT.—W. Goldsworthy, Feb. 20: We are pushing on the sinking as fast as possible; there is no particular change to notice in the ground tince my last report.

SOUTH WHEAL GRENVILLE.—G. R. Odgers, W. Bennetts, Feb. 15: The lode in the engine-shaft, sinking below the 30, is from 15 to 18 inches wide, composed principally of quartz. The lode in the 30, east of the engine-shaft, is 2½ ft. wide, composed of quartz, gossan, and iron, with a little tin. The lode in the 20 east is 20 in. wide, composed also of quartz and gossan, with a little tin, but not to value.

ST. BRIDE'S SLATE QUARRIES.—T. Nicholas (Vagur Colliery, late Manager of the Danderwen), Feb. 14: The first, the Abereiddy, is opened out into four well-constructed galleries, which are all in good quarry order, producing an excellent slate, but rather dark in colour, the majority of which is of the largest sizes, as a proof of which in the last month they produced 19,000 of 10 by 20 well made slates, and the quarry produced 72,000 size slates, independent of the locals. This quarry is sufficiently opened for regular slate working for many years to come, without any further expenditure for either casting off tops or extending the galleries. I have examined the slate list of prices, and also the contract for making the slates, and find it to average a very large percentage of profit—for instance, one of the sizes is produced at 1l. 19s., and sells at 7l. The slates at present are carted from this quarry to the company's shipping port, which is about 2½ miles, for 2s. 9d. per ton; but when the intended tramway is laid this may be done for less than 6d. per ton—perhaps 4d. The second quarry is the Porthgain, producing both slates and slabs, and, like the Abereiddy, it is largely opened, but still requires an additional outlay to complete the works. They are fast cleaning out the rubbish from the old workers, but the company has only recently set about the clearing and shaping this part of their property. I estimate that to clear out all the rubbish from the bottom of this large quarry and extending the second gallery, in order to work extensively the slab on the gallery below, will take at least another ten months. In addition to this, it is also necessary to drive an additional 40 yards of tunnel, to take off cheaply the present rubbish from the third gallery. In order to put the quarry into constant returns a further outlay of at least 300l. will be required, after which there will be at Porthgain a quarry opened for large returns for the next five or six years. The slates are a medium blue colour, and of a fair quality; but the slabs are of the largest dimensions required, and easy to remove from the beds—in fact, can be raised, planed, and sawn at less cost than any other quarry I am acquainted with, and I believe I am correct in stating that they can be produced at less cost than any other slab quarry at present at work in any part of Wales. This quarry is capable of yielding almost any given quantity of slabs, say 50 tons per day, and the majority of the large-t dimensions. I consider this slab can be produced at a cost for raising, planing, and sawing ready for the market of 8s. per ton, and will sell at from 20s. to 40s. per ton. This great margin of profit may seem beyond credit, yet I affirm that it is correct, and this is accounted for by the rapid and easy manner it can be taken from the rock, and afterwards the quick manner it can be passed over by the plane. This quarry is situated within 200 yards of the mill-house, and about the same distance from the port of shipment. The third quarry is the Trwnellwyd, upon which the company have made a very large outlay, but which has to be extended. The tops are removed from the slate vein for 25 yards to the east, and across the quarry to the north for 30 yards, and to the depth of 15 yards. The rock at this point is firm and pure, and produces the very best slab known, always commanding the very highest price of the market, the orders being at all times far in advance of the supply. I find the produce here has hitherto been only small, but a greatly increased quantity may now be depended upon, and I should expect that in another three months the amount of slab raised may be trebled. The cost of produce is about 20s. per ton, and the present sale list of prices I notice are from 30s. to 70s. per ton. The produce of this has to be removed to the company's shipping port, a distance of two miles, by boats, or carted by road. I believe I have now given you an accurate description of the St. Bride's Quarries. You will notice that, although they are largely opened, a further outlay is yet required to complete them for lasting returns; but no doubt rests upon my mind that the property is altogether a very good one, and ought to be made a very profitable one, if only rightly worked, with moderate economy.

ST. JUST AMALGAMATED.—Richard Pryor, W. White, R. Wearne, Feb. 19: Eastern Mine—Phillips's Engine-shaft: The lode in this shaft, sinking below the 30, is more kindly than it has been for some time. The lode in the 20, east and west of caunter, is producing a little tin, but not enough to value.—Western Mine—Saveall's Lode: In the 100 end, east of engine-shaft, the lode is worth 7l. per fathom. The lode in this level, west of shaft, is worth 5l. per fathom. The lode in the 90, east of shaft, is worth 4l. per fathom. In this level, west of shaft, the lode is at present disordered by a cross-head. The lode in the 76 west is worth 5l. per fathom.—Owl Lode: The lode in the 40, north of Reddipper shaft, is worth 5l. per fathom. The lode in the 20 north is at present poor, being in a bar of ground gone through in the level above; here we expect an improvement daily. The lode in the 20, south of Saveall's, is worth 5l. per fathom. The lode in the 10, north of Reddipper shaft, is worth 9l. per fathom.

SUMMER HILL.—W. Wasley, Feb. 20: The cross-cut driving from the south-west level is out 16 yards, and good progress is being made, and I am glad to say that the ground is looking a little more favourable for ore. Having cut into some old workings in the level driving east of the cross-cut, north of Hale's shaft, I put the men to drive the above cross-cut north of the old down hill level, where we have driven 9 yards, and expect in a yard or two more to cut a joint coming in that direction from No. 4 shaft, on which I hope to get good veins of ore by opening on it east, towards where they got some fine runs of ore in the old mine. We sold last Thursday 25 tons of ore, which realised 249l. 7s. 6d.

TAMAR VALLEY SILVER-LEAD.—John Goldsworthy, Feb. 20: In the 20, south of shaft, the taking down of the lode was completed yesterday. I am pleased to say the same is 2 ft. wide, composed of fluor-spar, quartz, prian, mundic, and silver-lead ore of rich quality, and presents a most promising appearance. In the 10, driving south of shaft, the lode is full 2 ft. wide, composed of fluor-spar, quartz, prian, mundic, and silver-lead ores, producing 3 cwts. of the latter per fathom, with indications of a further and speedy improvement. The prospects in the 20 and 10 fm. levels are most encouraging.

TREVENEN AND TREMENHEERE.—J. Medlyn, C. George, Feb. 19: The 204 yields a little tin, but not to value. The 197 end is worth 24l. per fathom; the stope in the back is worth 18l. per fathom. The lode in the 187 end is large and disordered; we are driving on the north part for speed with full hope of finding improvement, as in the level below; The stope in back is worth 6l.

per fathom. No change in the 172 end since the last report. This level is being driven on the north part for speed. No. 1 stope is worth 20*l.* per fm.; No. 2 is worth 30*l.* per fm. The stope in the 162 is worth 30*l.* per fm.

VIGRA AND CLOGAU.—W. J. Holman, Feb. 20: By to-day's post I forward you 25 ozs. 9 dwts. 18 grs. of gold. The sinking of No. 4 shaft, under No. 2 adit east, has for the time been suspended, and the men are now stoping away the ends of the shaft on the run of rich ore ground passed through in sinking. The lode in the western end of the shaft is 6 feet, and in the eastern end 4 feet wide; visible gold was broken from here yesterday, and the lode looks well. The lode in bottom of No. 5 shaft is 3 feet wide, and is still enlarging as we go down; the appearance of the lode is also improving. The cross-cut south from No. 1 level is without change, as is also the drivage from No. 1 shaft, the lode still keeping its usual width. At the Vigra Mine the Jenny's adit is still in dead rock. The drainage of the old Clogau Copper Mine is going on well; the water is now being lowered at the rate of 4 feet per 24 hours. At the reduction works we shall start the stamps to-day. The above quantity of gold has been received at the offices of the company this day.

WEST BASSET.—G. Lightly, Feb. 19: Grenville's Shaft: In the 154 east the lode is 3 ft. wide, yielding 1 ton of ore per fathom. In the 154 west the lode is 2 ft. wide, unproductive. In the 144 east the lode is 2¼ ft. wide, yielding 1 ton of ore per fathom. In the 144 west the lode is 2 ft. wide, unproductive. In the 94 west the lode is also at present unproductive.—Thomas's Shaft: Middle Lode: In the 75 east the lode is 1 ft. wide, yielding 1 ton of ore per fm. In the winze in bottom of the 65 east the lode is 15 in. wide, yielding 1½ ton of ore per fathom. In the 65 east the lode is 3 ft. wide, all saving work for tin. In the 65, west of cross-course, the lode is 2 ft. wide, saving work for tin. In the 65 fm. level west, on the south part, the lode continues 1 ft. wide, and is worth 4*l.* per fathom for tin.

WEST CARADON.—W. Johns, N. Richards, Feb. 19: Allen's lode in the 170, east of the main cross-course, is split up by a horse of granite, making it altogether about 2½ ft. wide; the two leading parts are about 1½ ft. wide, spotted with copper ore throughout. The lode in the 155 fm. level east is not so large, about 1½ ft. wide, but containing more copper ore than we have seen in it for some time past. In each of these ends the indications are such that we believe a good lode of ore is not far ahead of us. Clymo's lode, in the 128, is presenting a much better appearance; the lode is very regular, containing stones of red oxide of copper. We are compelled to suspend the driving of the 128 west, on Jope's lode, which is worth 10*l.* per fm., for want of ventilation; this will be remedied when the rise is communicated with the winze sinking below the 116, which we are daily expecting to hole. In the 116 west, on this lode, we are opening out moderate tribute ground, worth 8*l.* per fm. The sinking of Marina's shaft is going on very satisfactorily; we shall cut into the lode next week, and will send you our report as to how it looks. Elliott's engine-shaft will be down the required depth to make a 180 fm. level, we hope, by our next setting-day; we shall then commence to cross-cut west to the main cross-course.

WEST OKEL TOR.—J. Rodda, Feb. 20: The costeaning is being continued in a beautiful mineralised channel of ground. We have during the past week met with some branches and floors of spar, containing a little sulphuric mundic and spots of lead, but as we have not yet come upon any lode other than the two copper lodes previously reported on, which are of a very promising character.

WEST PRINCE OF WALES.—W. C. Cock, Feb. 17: The ground in the engine-shaft is of the same character as stated in my report last week, being a mixture of spar and capel the whole size of the shaft. In the adit end the ground is favourable for progress, and in a few days we shall be in the required distance to commence rising against the shaft.

WEST ST. IVES.—James Evans, Feb. 20: In the level driving west, on No. 1 lode, we have intersected the cross-course. The lode made rich stones of tin and copper up against it, and we calculate when we find the lode the other side of the cross-course to meet with tin.

WEST TOLGUS.—Feb. 19: Taylor's shaftmen have commenced to drive south in the 95, towards the lode, at 12*l.* per fm. In the 85 west the lode is 2½ feet wide, consisting of spar, capel, and killlas, unproductive. The lode in the 85 east is 5 ft. wide, producing 5 tons of ore per fm., worth from 20*l.* to 25*l.* per fm. We have four stopes over the back of the 85, working by 24 men, at an average price of 3*l.* 7*s.* 6*d.* per fathom; each stope is worth 15*l.* per fathom. The lode in the 75 is 4 ft. wide, chiefly consisting of spar, producing occasional stones of ore—a strong, kindly looking lode, and very wet. In the rise over the back of the 75 west the men are rising by the side of the lode for speed. We have two stopes over the back of the 75 west working by twelve men, each stope worth 15*l.* per fathom. In the 65 west the lode is 2¼ ft. wide, yielding 2 tons of ore per fathom. The lode in the 50 west is 2 ft. wide, producing 1 ton of ore per fm.—a verr promising lode, and letting out a quantity of water. Richards's shaftmen are engaged in fixing the pitwork at Richards's shaft, and are getting on pretty well. The water is very quick at Taylor's engine-shaft.

WEST WHEAL KITTY.—Wm. Vivian, Feb. 20: In the middle adit level we are driving on the north side of the lode; it is about 9 ft. wide, worth about 30*l.* per fathom. The stope in bottom of the middle adit level is a little improved, but we have a great quantity of water to draw at this season.

WEST WHEAL TREMAYNE.—S. Roberts, Feb. 18: The ground in the north cross-cut is much altered, and shows signs as if it were approaching near a lode. No other change in either the ends or pitches.

WHEAL CREBOR.—J. Gifford, Feb. 18: The 120 has been driven west of Cock's shaft 47 fms., and the lode cut through in several places, where it was found large, varying in size from 4 to 10 ft. wide, composed principally of capel, peach, quartz, and mundic, with occasional stones of copper ore, but of no value. The end is now within 63 fathoms of Kelly's shaft, and some fathoms below its bottom, and driving by the side of the lode; ground easy for exploring. The 120 east is driven about 18 fms. from the shaft, but has been suspended for several months. This end should be prosecuted, for reasons explained before. The 108 east is driven about 90 fms. from shaft, the last 40 fms. on the north lode, which has yielded several tons of copper ore, but not enough to pay for driving. The present end is poor. About 16 fms. behind the end a cross-cut has been put out, and a lode intersected, which yielded about 6 tons of copper ore in 2 fm. long, but did not make either east or west, and the driving is suspended, as I think it only a splice of the south or main lode, as directly over this point in Davis's pitch, 6 fms. above, the lode appears to be split, the main, or one part, being full 4 ft. wide, going down almost perpendicular, which appears to be standing south of the drivage, which can be proved by working of the above pitch. The 96 and 84 fathom level ends east are both suspended. A rise has been put up in the 96 east, and communicated with the 84, which has given good ventilation, and opened out tribute ground. The 96 fm. level cross-cut south is driven 134 fms. from shaft; the ground is strongly mineralised, and easy for exploring, although we have not met with the lode as yet, I am fully satisfied it is still in advance of the end. We have four pitches working, three with two men in each, at 13*s.* 4*d.* tribute; and the other, Davis's, in the bottom of the 96 (before referred to), by four men, at 8*s.* 6*d.* tribute. We have sampled, and have for sale, on Thursday next, computed, 103 tons, and about 30 tons now broken on the mine. As to future working, I have given the subject due consideration, but can see no reason to alter the opinions expressed in my letter of Thursday last.

WHEAL EMILY SILVER.—J. Rabey, Feb. 20: The stopes in the back of the adit level are looking well. We are still taking down the lode, and another parcel of several tons of silver ore will be ready for sale in three week. Four men are sinking a shaft on the back of the lode, between the footway shaft and David's shaft. We are doing this instead of driving the cross-cut, as stated in a former report. By sinking on the lode we shall be raising silver ore, and this will add to our returns, as we continue to raise ore in the adit level. The tenders for silver ore will be received on Monday next, and particulars will be published next week.

WHEAL GRENVILLE.—G. R. Odgers, Wm. Bennetts, Feb. 15: The lode in the 130 west is from 18 in. to 2 feet wide, composed of quartz and gossan, containing good tin. The lode in the 100 west is nearly 5 ft. wide, and worth for tin 12*l.* per fathom—a good lode; this level is now opening out a good piece of tin ground. The lode in the winze sinking below the 90 west is 4 ft. wide, and worth fully 18*l.* per fathom. We have commenced to-day to take down the lode in the 90 west, where we find good tin, with copper ore, &c.; we shall finish taking down the lode by Tuesday, when you shall be fully advised as to value and appearance. We are glad to tell you that the pitches, on the whole, are looking pretty well.

— G. R. Odgers, W. Bennetts, Feb. 20: Having holed the rise above the 110 west we have placed the men to drive the 110 end, where there is no change. The lode in the 100 west is between 5 and 6 ft. wide, producing good work for tin, worth fully 15*l.* per fm., and which is a splendid looking lode, the ground being easy; this end is opening out good tin ground. We have not taken down any lode in the 90 east. We have stripped down the lode in the 90 west for 3 ft. wide, and not yet through it; so far as seen it is worth fully 10*l.* per fm., and from the appearance of it we believe that both in the 90 and the 110 west we shall find a lode similar to that in the 100 west. The lode in the winze sinking below the 90 is 4 ft. wide, worth for tin from 18*l.* to 20*l.* per fm. The pitches, on the whole, are producing their usual quantity of tinstone.

WHEAL KITTY.—Wm. Teague, Wm. Polkinghorne, S. Davey, Feb. 17: In the 82 fm. level on the old lode, driving west of Holgate's shaft, the lode is 2½ feet wide, producing 8 tons of mundic per fm., and good stones of tin, a very kindly lode: such appearance seldom fail in this neighbourhood of making a deposit of tin.—Pryor's Lode: In the new shaft, sinking under the 82 fm. level, the lode appears to be forming under the gossan, which have destroyed it for some time, and is producing good stones of tin. We shall complete the shaft to the 96 fm. level in the course of another week, and then open on the course of the lode at that level. In the 82 fm. level, driving west of shaft, the lode is worth for tin 10*l.* per fm. In the 82 fm. level, driving east of shaft, the lode is worth for tin 6*l.* per fm. In the 82 fm. level, on the caunter lode driving north, the lode at present is not of much value, but we are daily expecting an improvement. In the 65 fm. level, driving west of shaft, the lode is worth for tin 8*l.* per fm. We have suspended the winze on the caunter lode for the present, on account of cutting water, and shall now wait for the 82 fm. level, referred to above, to come under it, and then open up the lode, which in the 65 fm. level was very productive. The winzes in the 65 fm. level, and the 54 fm. level referred to in our last report, are communicated with the respective levels. In the 44 fm. level, driving east of shaft, the lode is producing saving work for tin. Since the last meeting—in fact, during the driving of the last 2 fms. on the bottle lode in the 24 fm. level—a decided improvement has taken place in the character of the lode, which is now 2 feet wide, and worth for tin full 6*l.* per fm., a very kindly lode. We have met with nothing worthy of notice in the 44 fm. level cross-cut north from Pryor's lode as yet, nor can we reasonably expect to for another 10 or 15 fathoms. The tribute pitches continue to yield their usual quantity of tin, nor is there much falling off, so that we hope to go on raising from 45 to 50 tons per quarter for a considerable time to come.

WHEAL KITTY (Uny Lelant).—William Rosewarne, Feb. 20: South Russoe Lode: The lode at the flat-rod shaft, sinking below the 30, is worth for the length of the shaft (9 ft.) 8*l.* per fathom. The lode in the winze sinking below the 30 east is worth 8*l.* per fathom. The lode in the 30 east is producing a little tin.—North Russoe Lode: The lode in the 150, east of No. 3 winze, is worth 3*l.* per fathom. The lode in the 150, west of No. 1 winze, is worth 4*l.* per fathom. The lode in the winze sinking below the 150 is worth for the length of the winze (9 ft.) 5*l.* per fathom. The lode in the 110, east of Bolitho's winze, is worth 2*l.* per fathom.—New Lode: The lode in the 140, east of the cross-cut, is opening tribute ground.—North Gowan Lode: The lode in the winze sinking below the 60, west of Rogers's shaft, is yielding a little tin. The lode in the rise in back of the 50, west of Rogers's shaft, is unproductive. There is no change in any of the cross-cuts during the past week.

WHEAL MARY ANN.—P. Clymo, J. Harris, J. Stevens, J. Skeat, Feb. 20: Clymo's shaftmen are still engaged fixing new pitwork from the 220 to the 230 fathom level; the cross-cut in this level is extended 16 fms. towards the lode. In the 220 north the lode is 2 ft. wide, worth 5*l.* per fm. In the same level south it is 2½ ft. wide, worth 16*l.* per fm. In the 210 north the lode is 3 ft. wide, worth 4*l.* per fm. In the same level south it is 4 ft. wide, worth 20*l.* per fm. In the 200 north the lode is 1½ ft. wide, worth 10*l.* per fm. In the same level south it is 2 ft. wide, worth 9*l.* per fm. In the 190 north the lode is 3 ft. wide, worth 8*l.* per fm. In the same level south it is 1½ ft. wide, worth 4*l.* per fm. In the 180 north the lode is 2 ft. wide, worth 4*l.* per fm. There is no change to notice in the 180 south. The stopes and pitches are producing much as usual. We sampled on the 14th inst. two parcels of lead ore—No. 1 computed 60 tons, No. 2 computed 46 tons, for sale to-morrow.

WHEAL SPARNON.—Wm. Tregay, Feb. 15: Belfry Shaft: The lode in the 15 fm. level east end is producing stones of copper ore, and promising for improvement. The lode in the 15 fm. level west end produces rich stones of copper ore, and will become more productive as we get away from the cross-course.

WHEAL UNY.—S. Coade, M. Rogers, Feb. 15: The lode in the engine-shaft is worth 20*l.* per fathom. The 130, east of engine-shaft, for 6 ft. wide, is worth 20*l.* per fathom. The 120, east of engine-shaft, for 6 ft. wide, is worth 10*l.* per fathom. The 110, east of the engine-shaft, for 6 ft. wide, is worth 10*l.* per fm. The 100, east of engine-shaft, for 6 ft. wide, is worth 9*l.* per fathom. The 130, west of incline shaft, for 6 ft. wide, is worth 7*l.* per fathom. The 120, west of incline shaft, is worth, for 6 ft. wide, 8*l.* per fathom.

FOREIGN MINES.

ANGLO-BRAZILIAN.—Capt. Thos. Treloar reports for December—The produce amounts to 2725 oits. (= 314 ozs. troy) of gold:—

Produce, 2725 oits., at 9*s.*	£1226 5 0
Cost	1642 12 10
Loss	£ 416 7 10

The operations have been carried on in the usual manner during the month. Notwithstanding the Christmas holidays the attendance has been a fair one, the number of sick less than for some time past. Progress has been made in Dawson's south towards unwatering old workings, but no change has yet taken place in the auriferous quality of the stone from the Buraco Secco and Haymen's. The produce for the present month is in excess of that for November. We have not yet touched the jacotinga in rising at Dawson's south. The continuation of the end has been pushed on, and a large stream of water is flowing from it. To prevent accidents a borer hole is kept ahead of the workings. The force at this section is large, and being employed in the arduous duty of rising and driving, the duty per borer is small, but when once communications have been made to old excavations and water let down this will at once increase. Dawson's canoa presents little or no change. North of the same, where we are now rising to communicate to old bottoms, between Dawson's and Haymen's, the lode looks well. Foster's stone maintains its good quality; we keep the place fully manned. The Buraco Secco lode and that at Haymen's shaft are large, but at present poor; in the former a line of "caco" is making its appearance in the footwall. The development of the mine has taken longer than was originally supposed, but we are sanguine that 1868 will be a more successful year for us than 1867. Extracts from letters dated Jan. 18 state that no change had taken place in the auriferous quality of the stone from Haymen's shaft and the Buraco Secco lode.

DON PEDRO NORTH DEL REY.—Capt. T. Treloar reports for Dec.:—The gold return amounts to 10,189 oits. (1175 ozs. troy), and it has been derived as follows:—

Wash-house or vein stuff	Oits. 3422	
Stamps and strakes or general work	6767	=10,189
PRODUCE AND COST.		
Produce, 10,189 oits., at 8*s.* 6*d.* per oit.	£4330 6 6	
Cost	1897 4 7	
Profit	£2433 1 11	

The weather has been exceedingly changeable—rain, cloudless skies, or burning sun, and thunder storms—and owing to this we have had an unusual amount of sickness. In addition to this the Christmas holidays have told against our force, and the axle of Haymen's stamping mill failed; happening just before the commencement of the Christmas holidays, when the natives cannot be induced to work, repairing it occupied 10 days, and threw back our gold return some 800 oitavas. But even with these unfavourable circumstances, we have a produce of 10,189 oitavas of gold, and a profit of nearly 2500*l.* sterling, and when it is remembered that December and January are, as a rule, the two most trying months in the year, I hope the result for December will be received as satisfactory. On the first and second lines of gold but little has been done for want of force, and in that little no change occurred. The third and fourth lines have afforded vein stuff for wash-house, but it has not been rich. The line No. 3, the excavation on which is now 21 fathoms below Alice's level, and below where we had the last rich bunch of gold, is changing, and we are hoping that we are again nearing riches. The fissures have appeared in the line No. 4, in descending, and they have impoverished it, but not to such an extent as occurred in the lines No. 2 and 3. Upward the excavation has reached our stopes at Hilcke's level, when this line was too poor to afford vein stuff. A portion of the said line is still standing above Hilcke's level, but so far as we have worked on it, it has been better in descending than in ascending. The stopes generally have yielded about the same as usual. Some Englishmen having offered their services for a few months I have gladly availed of them, for the sake of pushing on the adits.

PRAIA.—Our supply of cascalho has again been drawn from the Praia; but the Christmas holidays, and the failure of the axle of Haymen's stamping-mill, have prevented us from making preparations for stamping it alone, and thereby testing it carefully. I hope, however, that this will be done during January.

As to the general operations up to Jan. 18, Capt. Treloar states that the works generally have proceeded fairly, but the lines of gold, Nos. 3 and 4, have been poor, so our produce is chiefly from the general work or stopes. Operations will be resumed forthwith on the lines of gold Nos. 1 and 2, but we have not sufficient hands to man these points without suspending the adits. This I am unwilling to do, as I am anxious to get these points, especially the middle and deep adits, advanced as much as possible during this and the succeeding month. Stamping cascalho from the Praia separately has been commenced. The weather continues very changeable and unseasonable, but I am pleased to say that the health of the establishment has improved. Produce cleaned up to date, 4042 oitavas of gold, equal to 465 ozs. troy.

ROSSA GRANDE.—Mr. Ernest Hilcke reports for December—The gold return for the month amounts to 16 lbs. 3 ozs. 2 dwts. Having taken charge of the Rossa Grande property on the 16th inst., I have since this examined it as closely as possible in this short space of time, and I have now the pleasure to hand you my first report thereon.—Upper Formation, First Workings: An adit has been driven 76 fms. south in the mountain, and has intersected the lode, and a level is extended eastward thereon 22 fms. At the end of this level stopes have been opened, and communicated to the old workings. The length of these stopes is 22 ft., and to the old workings 23 ft. The lode in this place is composed of clayey matter intermixed with stone, containing quartz, iron, platina, and lead. The size of these stones vary from that of a pea to 3 or 4 ft., and where these large stones are found the lode is richer, but small stones and clayey matter are also very auriferous. During December 137 tons have been extracted, and treated from this place, and yielded 14 lbs. 11 ozs. 5 dwts. of gold =11·349 oitavas per ton.

SECOND WORKINGS are east of the first, and about 15 fms. above them. These are open workings from the surface; the lode in this place is poor, it is composed of quartz, pyrites, and oxide of iron; 120 tons of stone had been extracted before my arrival, partly in this month and partly in the previous one, which have been treated, only yielded 1 lb. 3 ozs. 17 dwts. of gold=1·143 oits. per ton. In consequence of the accident at Morro Velho force is coming in fairly, but the little accommodation for them on the establishment will soon be occupied, and will put me under the necessity of refusing able men. Extracts from letters dated Jan. 18 state, with reference to the first workings, that the lode in the adit and level looks well; although no gold is visible in the stone it has, as already known, yielded, on an average, 11·349 oits. per ton during December; and after the air-shaft has intersected the level, and the tramroad is laid down, there will be no donbt that this mine will prove a very profitable one. As to the size of the lode it is not yet ascertained, but the little exploration made thereon in this month has shown that it is by far larger than first reported.

CHONTALES.—W. B. Paul, Jan. 7: Consuelo Mine: Our operations in this mine have been very limited during the month, in consequence of another outbreak of cholera in our midst, and, as before, nearly all our natives left at once. No. 3 level has been driven east on the lode 7½ varas, varying in width from 2 to 3½ feet; for some 3 varas it was small, and yielded only ½ oz. per ton, but in the last 3 varas it has been getting larger and more productive; it is now about 5 ft. wide, and yielding fully 1 oz. per ton, average. I expect a great improvement here in a short time, as it was the same in the upper levels. No. 3 has been driven west from cross-cut, to meet the lode, 4¾ varas; the lode is very large and hard, but the soft branches are yielding good samples of gold, and are saved for grinding. The intermediate levels between Nos. 2 and 3 levels, driving east, have been in a similar lode to No. 3 level; lode small, and worth about ½ oz. per ton; these will shortly be holed to the old workings, and will greatly facilitate our operations. Estrella shaft is being sunk downright through dead ground, and I expect to hole it to the adit level in the present month. The lode in the shallow level, driving west from this shaft, is very large, but the size unknown, as we can only carry the size of the level; it is composed of friable quartz, with a great quantity of magnetic iron and manganese, and contains ⅛oz. of gold, average.—San Antonia Mine: Little has been done towards completing the deep adit tunnel for want of men, but we are now pushing it on again with contract men, and hope to make it available for discharge of ores to the mill in a few days. In No. 3 level, east and west of cross-cut, the lode is small and poor. In No. 4 level west the lode is small, but yields about 2 ozs. of gold per ton average; this, and all workings below it, are suspended through foul air. The No. 4 level, west from east San Antonio shaft, is now being pushed forward with all speed, in order to communicate with and ventilate the above-mentioned levels; the lode is 3½ ft. wide, and yields an average of ½ oz. per ton. No. 1 level east has now reached the clay, being close to the surface. Two winzes are now being sunk in the bottom of this level. The lode is 2½ ft. wide, and yields ¾ oz. per ton average.—Santo Domingo Mine: The lode in the deep adit level east and west is without alteration since last reported. The winze sinking below No. 1 level is very large, containing a little gold, but not to value. But little work has been done in any other part of this mine during the past month.—Cabezalis de Javali: The lode in the adit level is without alteration. The party whom I put to explore the vein eastward have not been working for some time past, but before leaving they had discovered the vein, from which I have taken some good samples of gold; the lode is very large, composed of friable quartz, oxide of iron, spots of mundic, and lead. We shall now sink a shaft on this some few fathoms, and from its appearance I hope to report favourable on it in my next. Interupcion is without alteration.—Pavon: In the adit level east and west the lode is about 12 feet wide, having cross-cut through it in the past month. It is composed of hard quartz, containing rich lead ores, but poor for silver. There is a great quantity of black iron and manganese; one branch, about 2 ft. wide, is composed of soft friable quartz and prian, and contains a little gold, but not to value; it has a very promising appearance in both ends, though poor at present. Mr. Wells is now getting on well, having completed the frame in the wheel-pit at Pavon, ready to go on with the erection of the wheel and other parts of the machine. I do not apprehend any further delay in the completion of this machine, and hope to see it at work by about the end of February or the middle of March. The tramway contractors have been greatly thrown back in their work in consequence of the cholera, nearly all their men having left, but there are a few of them coming back every day. I hope they will be able to have the road and watercourse ready in time for the new machinery. The new hospital is finished, and taken possession of by Dr. Robinson. I have not been able to do anything to the Estrella machinery since last month, and as it is now getting towards the dry season, when water will be slack, I do not purpose doing anything to it for some time, but to employ the carpenters in preparing house accomodation for the officers and the coolies against their arrival. I am glad to say all our English staff are well. I am pushing on Mr. Wells with the pavon machine as much as possible, cutting plank for him, and got all the cogs ready to clean up and put in. This takes away several men, and is important to be done. Next, I am pushing on the adit level in Consuelo, to get under the winze, which is only about 9 ft. above the back of this level, and I am driving an intermediate level from No. 2 shaft, to communicate with the old levels. These I hope to have completed by the middle or 20th of this month, and when done you can see that I shall have several places to work on at once. I think we may calculate on having eight cups at Pavon, and two or three at St. Domingo, working during the dry season, if we can get labour enough to provide ore to keep them going. We shall then have done with the heavy contracts for tramways, water-courses, and machinery, and our cost will be much lightened; at the same time, our returns will increase. The ground (during the late heavy rains, and which still continue) in Consuelo has been very heavy, and has kept two men constantly employed timbering, but we have managed to keep it all right, and have no doubt we shall continue to do so; but we cannot touch any of the pillars above No. 2 level till the dry season sets in. Then it is my intention to put all the force possible on it, and take them all away, filling the places from surface and securing the mine, preventing all this trouble for the future. From this is my hope for the dry season, and will, I hope, pull us through the present difficulty. During the past month we have not been able to bring any ore from Consuelo, in consequence of laying the new tramroad over a portion of the old cart-road, and the tramway itself has suffered much for want of labourers to carry on the work; the contractor, however, is a pushing fellow, and is doing his best to have it completed by the middle of the month. When finished we shall be able to draw a large supply of ore of good quality from Consuelo for present use. I do not know what to promise you for next remittance, as everything is so uncertain, but certainly, I think, not less than 300 ozs., and I hope much more than that. This depends upon the quantity we can grind from Consuelo Mine, being dependent as yet for that on the time the tramway will be completed. You may depend upon it that we are all doing our best, and for my part no one is more disappointed and grieved at so many drawbacks. I hope we shall soon have more prosperous times.

CAPE COPPER.—J. Williams, Jan. 11: Ookiep Mine: The engine-shaft has been sunk during the past month 1 fm. 1 ft., in a very hard granite rock: at present the ground appears to be changing in its character, having a little more quartz and spots of ore mixed up with the granite, but still very hard and spare for sinking; re-set Jan. 1, 1868, to six men and three labourers, at 60*l.* for 1 fathom, or the month. No. 3 winze has not proved so productive throughout the month as was expected; it is again improving, and will now yield about 4 or 5 tons of copper ore per fathom, and judging from its present appearance I think it is looking promising for further improvement. Ground sunk during the past month 1 fm. 3 ft.; re-set Jan. 1 to two men and four labourers, at 25*l.* per fathom for 2 fathoms, or the month.—Driving South: This level has been extended south in the past month 2 fms. 2 ft. 6 in.; it has produced some fine stones of copper ore, and will now yield about 1 ton of ore per fathom. Re-set Jan. 1 to two men and two labourers, at 16*l.* per fathom for 2 fathoms, or the month.—Driving North: This end has been extended north during the month 2 fms. 2 ft. 1 in. without any change to notice; re-set Jan. 1 to two men and two labourers, at 12*l.* per fathom for 1 fathom, or the month. December extracts, 285 tons 15 cwts., of 2352 lbs., averaging 31·9 per cent.—Spectakel Mine: I have very carefully examined this mining centre, and all the underground workings above the water, and find there are some very rich branches of copper ore left standing in different parts of the mine, which I believe can be taken away at a good profit. I would recommend the driving a trial level west to prove a piece of unexplored ground, in which we may hope to meet with some rich deposits of ore. We have five pares of tributers now working in this mine, at an average tribute of 4*s.* 6*d.* in 1*l.*; the pitches are looking well, and the men are making good wages. With the same number of tributers now employed I think, from the present appearance of the pitches, we may fairly calculate on raising 25 tons of rich copper ore per month. Extract of tributer's copper ore for November and December, 51 tons 18 cwts. 2 qrs. of 2240 lbs., averaging 35·72 per cent. The smelting-works produced during December 5 tons metal and 16 tons regulus. A further addition of 50 convicts has been made to the road party in Namaqualand. Bills of lading are received for 400 tons of ore per Flora.

JAVALI.—The directors have received the regular monthly report of the manager for December, and also a letter, dated Jan. 8, together with a remittance of 155 ozs. of gold, the produce of 155 tons of ore, ground in the old delapidated mills. The supply of labour continued uncertain, in consequence of rumours and fears of cholera, but there was every hope that the natives would soon return in greater number. The workings at the Socorro have been pushed ahead with energy. The ore continues to be of the same uniform good quality as always heretofore. At the Nispero four barmen have been kept at work during the entire month, and they extracted some magnificent ore. The lode there is soft, and requires timbering. The two upper tunnels have been driven ahead with all possible speed. The engineer sent from San Francisco to put up the new Californian machinery reached Javali on Jan. 7. Every preparation had been made for the transportion and erection of the new machinery, which was to arrive in the country by the end of January, and, in the opinion of the Californian engineer, would be in working order by the end of March.

PESTARENA UNITED.—Thos. Roberts, Feb. 13: Piedimulera: You will be pleased to hear that we have on hand a large quantity of amalgam, produced since January 1, and which is the largest gold production ever obtained in this valley during the month of January, when, in preceding years, no returns whatever were made from these mines. The remittance of gold at the end of this month will, therefore, we hope, be about 1000 ozs., which should be most satisfactory.—Pestarena: The carriage of ore over the wire-ropes is now going on, and as soon as the men engaged in it have gained practice it will become more regular. The bottom stopes of the Peschiera continue worth for gold over 100*l.* per fathom.—Battiglio: The lode in the back of the Cavetta level yields 1 oz. of gold per ton of ore, and the lode in the bottom of the Cava Vecchia has improved lately.—Val Toppa: In the cross-cut driving west from new tramroad level we have cut another part of the large quartz lode, and it looks as if we were about to make a very important discovery here, which would greatly add to the resources of these mines. All the stopes continue as last reported.

WEST CANADA.—William Plummer, Jan. 15: Huron Copper Bay: The stope west of Stephen's winze yields 2 tons per fathom; on the east it yields 2½ tons per fathom; on the east of Palmer's, below the 20, 3 tons per fathom; on the west of ditto, 2½ tons per fathom; and on the east, below the 30, 3 tons per fathom. The winze below the 50, west of Palmer's, yields 1¾ to 3 tons per fathom, and good progress is being made in sinking. Bray's shaft is going down slowly. We hope, however, in a month from this time, to be down for a 60 fm. level. The lode in the 30 (on Fire lode) yields 2 tons per fathom. The lode in the stope, east of Carmichael's winze, is poor.—Wellington Mine: The 40, west of Crase's, is progressing well, but the lode is poor. There has nothing yet been seen in this level that will pay for working, at the present price of copper. The lode in the winze in advance of this yields an average quantity of ore. The stope east of Mitchell's, below the 24, is poorer than it has been some time, but we believe it will again improve. The stope below the 36, east of ditto, yields 2 tons per fathom; and the 36, going east of the shaft, is of a similar character and produce. The stope east of Hooper's is worth 2 tons. West of Rowe's the lode is worth 1¾ ton.—Bruce Mine: The lode in the trial shaft looks promising. The 25, going east, is still poor. The stope below the level yields about 2 tons per fathom. The stope over the level yields about 1½ ton per fathom. The lode in the 25 is wide, and carries ore, mixed throughout, but is not rich enough to pay expenses at the present price of copper. The lode in the level going west has been poor since we last reported, but is again improving. Things are progressing favourably, and the dressing is being pushed forward as fast as possible. I before informed you that, owing to the repairs we had to do to the machinery, and the Christmas holidays, the dressing would fall short of the previous month. It amounted to 200 tons.

COPPER MINING IN SOUTH AUSTRALIA.

THE BURRA BURRA MINE.—During the period embraced between March 28 and September 30, the quantity of ore obtained has yielded 1300 tons, of 16 per cent.

MOONTA MINE.—A smaller number of hands than usual is employed; and although the quantity of ore now being raised is smaller, yet the average percentage is higher than formerly.

WALLAROO MINE.—About the usual quantity of ore is being raised, but the average produce is small, not exceeding 10 per cent. of copper.

YUDANAMUTANA MINE.—The sales of rough copper at Adelaide continue at from 40 to 50 tons per month.

BLINMAN MINE.—Captain Terrell reports:—

No. 1 winze in bottom of the 10: The lode in this place has been good all the month, and in the bottom there is now about 3 ft. wide solid ore, and fine stopes of ore standing both east and west from the top to the bottom of the winze.

No. 2 winze in bottom of the 10: The lode in the bottom of this place remains the same as last reported; we have not been sinking this month, but driving to the west; we have driven in about 12 ft., and stoped away the back; the lode still good, from 1 to 2½ ft. wide, solid ore.

The stope in the back of the 10 has turned out some fine ore this month.

The stope in back of the 20 is still looking well; the ore good, and ground soft.

The stopes south of No. 1 and No. 3 shafts, "big bunch," are looking the same as last reported—good payable lodes.

[ADVERTISEMENT.]

From Messrs. WARD and JACKMAN:—The aspect of our markets for British Mine Shares continues to be encouraging and satisfactory; the demand during the week has been good, and prices, with few exceptions, have been well maintained. The attention that was formerly confined to a certain few mines has extended, and now become more general, we may, therefore, expect a move in some of the speculative and progressive mines which for the time have been neglected. Intended buyers should, therefore, act at once. It is a general rule with the public to buy shares in a rising market—*i.e.*, when it is seen a particular mine is daily advancing in price, orders we find to buy flow in thick and fast, and as prices are peculiarly affected by supply and demand, the price of a temporary favourite soon becomes artificial and transient, for when the demand ceases the price recedes, and the public, disappointed of early gains, sell out without looking at the cause, and hence mere speculating for a rise often does injury to legitimate mining property. A good illustration of the effects of this system is exemplified this week in PRINCE OF WALES, which, from the withdrawal of buying orders in a great measure, has been depreciated in value about 12,800*l.*, or 1*l.* per share. The best time to buy is in times of depression, and there are many mines now in the market having certain points in prospect where the chances are in favour of a good rise at present, and a list of which we shall be happy to supply. The poorest mine of to-day may become the rich favourite of to-morrow, such are the uncertainties of underground operations, and were it otherwise mining would cease to be a speculation at all.

The belief expressed by some geologists that naphtha would be found in the Caucasus has been realised. A boring, 276 ft. deep, near Kuaaco, has struck a source of this liquid, which yielded 1500 barrels daily for one month;

more recently a second source has been discovered near the former, from which the naphtha jets to a height of 40 ft. above the ground, and flows out at the daily rate of 6000 barrels.

Projected New Companies.

Company.	Capital.	Shares.	Each.
East Essex Freehold Estate	£ 30,000	6,000	£5
Crown Land and Building	100,000	20,000	5
Sefton Hall	10,000	2,000	5
Stoke Newington Assembly Rooms	2,500	500	5
Land Company of London	20,000	2,000	10
Ragg's Patent Signal	5,000	500	10
Aska Sugar	60,000	1,200	50
Elementary Power Engine	30,000	3,000	10
Pentre United Steam Coal Collieries	100,000	20,000	5
West of England Marine Insurance	25,000	1,250	20

PENTRE UNITED STEAM COAL COLLIERIES COMPANY, 100,000*l.*, in 20,000 shares, of *5l.* each, with power to increase.—The objects for which this company is established are the purchase from FREDERICK R. GREENHILL and CHARLES P. GREENHILL their interest in the Pentre and Church Collieries, held on lease for an unexpired term of 50 years or thereabouts, from January, 1857; and also to otherwise acquire the reversion of the same collieries or any other coal mines, seams of coal, iron ore, blackband building stone, and fire-clay, or other similar materials; and to develope and work the collieries and mines so to be acquired, and to sell and manufacture, &c., and generally to do all other things that may be incidental or conducive to the attainment of the above objects. The Memorandum is signed by—FRANCIS C. BESCOBY, 15, Nottinghill-terrace, Kensington, Middlesex, gent., 1; WM. STEVENS, 8, Chenies-place, St. Pancras, Middlesex, accountant, 1; DANIEL E. CHANDLER, 18, Westmorland-road, Bayswater, Middlesex, gent., 1; DAVID NEWELL, 5, Prince's-street, Red Lion-square, Holborn, Middlesex, attorney's clerk, 1; GEORGE HEAD, Southwark-street, Christchurch, Surrey, marble manufacturer, 1; PETER BENJAMIN OPPENHEIM, 99, Gresham House, Old Broad-street, merchant, 1; CHARLES W. BULKY, Langham Hotel, Portland-place, Marylebone, Middlesex, gentleman, 1. The number of directors shall not be less than five, nor more than twelve. Qualification, 50 shares. The following persons shall be the first directors of the company (reserve being made of a seat at the board for FREDERICK R. GREENHILL, the vendor, after his purchase shall have been completed with the said company):—Messrs. A. ALISON, J. E. BILLUPS, J. HENDREY, C. MORRIS, and Colonel J. C. PHILIPS. The directors (except the managing director for the time being) shall be entitled to receive no remuneration whatever unless the company shall have paid a dividend of *5l.* per cent. per annum to the shareholders, and whenever the dividends to the members upon the whole of the capital paid-up shall be at the rate of *5l.* per cent. per annum or more the directors shall retain 1000*l.* per annum as their remuneration; and when such dividend as aforesaid shall be at the rate of 10 per cent. per annum the directors shall be entitled to retain a sum equal to one-tenth of the profits of the company as their remuneration.

ELEMENTARY POWER ENGINE COMPANY, 30,000*l.*, in 3000 shares of 10*l.* each. The objects for which this company is established are to purchase, acquire, develope, and work the letters patent granted to Baron von RATHEN, on or about March 23, 1865, No. 818, and Sept. 15, 1866, No. 2377 respectively, for his elementary power engine; also to purchase, acquire, develope, and work any other patents, or improvements having reference to compressed air, or any other elastic fluid or motive-power; also to grant licenses to work and use the said patents, or improvements, or shares to be purchased or acquired as aforesaid; and to manufacture, sell, or work for profit engines, or machines, constructed under, or according to, any such patents or improvements as aforesaid, and the doing of all such things as are incidental or conducive to the attainment of the above objects. The Memorandum is signed by—JAMES THOMAS COCHRANE, Guernsey Cottage, St. John's-road, Deptford, Kent, gentleman, 1; W. R. PRICE, 6, Amersham Villas, Lewisham High-road, New Cross, Kent, stockbroker, 1; MATTHEW NICHOLAS CREAK, Hebondale-street, Cubit Town, Poplar, Middlesex, master mariner, 1; JOSEPH THOMPSON, 184, Mile-end-road, Middlesex, appraiser and valuer, 1; JAMES ALBERT POLLARD, 12, Pleasant-row, Stepney-green, Middlesex, flour factor, 1; WILLIAM MOORE, Fairy-lane, near Dartford, Kent, miller and corn merchant, 1; CHARLES LAMB, 44, Bancroft-road, Mile-end, Middlesex, chemical agent, 1. Registered without Articles.

ST. JOHN DEL REY.—The advices received by the last mail informed the directors that little progress had been made in clearing the mines of the injurious vapour which more or less prevailed throughout. Unfortunately, portions of the south walls still continued to fall away, thereby adding to the large quantity of debris already in the mine by means of the former workings. Every effort was being made to obtain as much ore as possible for the stamps, and the expenditure was being reduced as rapidly as possible. The quantity and quality of the stone stamped at the Gaia stamps was not yet such as to guide to any opinion as to the gold contents of the lode.

DON PEDRO NORTH DEL REY.—The last advices showed that the operations for December resulted in a profit of 2433*l.* 1s. 11d. The profit realised from January to December amounts to 51,944*l.* 3s. 8d., and the amount at present standing to the credit of the profit and loss account is 22,685*l.* The directors report that the accounts to Dec. 31 have only just come to hand, but sufficient has already been ascertained to enable the directors to state that at the annual meeting, which which will be held as early in March as possible, they will be able to recommend a dividend of 5s. per share, making 13s. per share declared for the year 1867, or upwards of 92 per cent. on the paid-up capital of the company.

ROYAL COPPER MINES OF COBRE.—The adjourned meeting of this company was held on Thursday; the report of the proceedings appear in another column. The meeting, which was fully attended, came to the unanimous decision that the mines were much too valuable to be abandoned. It appearing, however, by Mr. Clemes's report that further capital would be required to develope them, and the Chairman stating that there were parties, such as trustees for minors, who did not wish to expend further money, a scheme for reconciling the conflicting interests of those who wished to continue with those who wished to withdraw, was submitted by the Chairman to the meeting. This plan appeared, as will be seen by the report, to give entire satisfaction to all present, and resolutions were unanimously passed requesting the directors to take steps to carry it into effect.

PESTARENA UNITED.—By the report from these mines (which appears in another column), it will be seen that a remittance of 1000 ozs. of gold is expected at the end of the present month. This will be the largest gold production ever obtained from this valley during the first two months of the year. A perusal of the communications with reference to this undertaking (which also appear in another column) cannot fail to be most re-assuring to the general body of shareholders.

THE IRON TRADE.—Messrs. Shaw and Thomson say—"In whatever direction we look, there are clear evidences of returning activity in this branch of commerce. The demand for rails, especially for export, is very large, and better prices are being paid. This part of the trade has suffered more than any other during the past 12 months, on account of the slackness of home demand; but it has excited surprise that the foreign shipments for 1867 exceeded those of any previous year by about 80,000 tons. This went very far to compensate for the decrease in the home orders, but it was insufficient to maintain prices. Russia took 126,000 tons of rails from this country last year, and, although a portion of this year's wants may be taken by the continental ironmasters, the great bulk of the orders will come to this country. There are large enquiries from Austria, which has a vast field for railway enterprise if money can be raised to build the lines. Over the whole of the Continent railways have got a start, which is sure to be followed up. Russia, Austria, and India were long dormant when other nations were awake to the great advantages of railway facilities; but those countries are now alive to these benefits, and large extensions may be looked for. The orders for rails from America have been few compared with the great wants of the country; business is hindered by political strife, which, it is to be hoped, will soon come to an end. It is hindering the commercial progress of the country immeasurably, and creating much distrust. The exports of iron to America in January were far below the average; there is a large outlet for rails there when confidence revives. The wants of our home railways are far larger than usual. Last year everything that could be postponed was left in abeyance; renewals were of the most limited character, and the extra demand in consequence will now fall to be met. The improvement in the shipbuilding trade is gradual and certain. The work being done on the Clyde is equal to an average year; and on the Tyne, Tees, and Wear there is more enquiry for ships. The demand for plates, angles, and sheets is decidedly better, and higher prices have been obtained in several instances. A large quantity of plates has been contracted for in the North of England for the Clyde. The superiority of the Cleveland district plates for strength and toughness is gradually attracting the attention of Scotch buyers. Bar-iron is in better demand for India, the River Plate, and Canada, and works are going full time which were only one-half employed before Christmas. Several contracts for bridge and girder work have been given out lately, which will diminish competion in future, and as enquiry comes forward better prices will be got. The enormous powers of production of pig-iron which are now lying aside, but ready to be put into operation upon the return of activity, do not encourage much hope of higher prices until the manufactured iron trade is very greatly improved."

THE COPPER TRADE.—Messrs. Vivian, Younger, and Bond (Feb. 21) write—Holders of West Coast produce continuing firm at last week's prices, and there being little offering in the market, transactions have been small. About 100 tons of bars have been sold, at 69*l.* 10s. for Urmeneta, and 70*l.* for Edwards, both Liverpool spot. Refined ingots are dull of sale, and 71*l.* has been accepted for 50 tons Urmeneta, at Swansea. No sales of ores or regulus are reported. The charters, advised from Valparaiso by last mail, during the last fortnight of 1867, comprise 1430 tons of fine copper—160 tons of bars, 620 tons of ingots, and 650 tons of fine in ores and regulus, but as the Deersiayer, which was to load regulus equal to 480 tons of fine, was totally lost on entering port, the actual charters must be set down as only 950 tons of fine copper. English raw copper shows rather more firmness, and second-hand parcels, at comparatively cheap rates, are becoming scarce. Large arrivals of fine foreign have taken place, principally of Wallaroo, but the whole is understood to have been sold for arrival. The market closes with a firm appearance.

The Mining Market; Prices of Metals, Ores, &c.

METAL MARKET—LONDON, FEBRUARY 21, 1868.

COPPER.	£ s. d.	£ s. d.
Best selected..p. ton	75 0 0-	76 0 0
Tough cake and tile	74 0 0-	75 0 0
Sheathing & sheets.	77 10 0-	79 0 0
Bolts	83 0 0-	—
Bottoms	86 0 0-	88 0 0
Old (Exchange)	66 0 0-	67 0 0
Burra Burra	83 0 0-	83 10 0
Wire.....per lb.	0 1 0-	0 1 0½
Tubes	0 0 11½	1 0

BRASS.	Per lb.
Sheets .....per lb.	9d.-10d.
Wire ..... "	8½d.-9½d.
Tubes ..... "	10½d.-11d.
Yellow Metal Sheath.p. lb.	7¼d.- —
Sheets ..... "	6¾d.- —

SPELTER.	Per ton.
Foreign on the spot.	£20 2 6 —
" to arrive ..	20 2 6 —

ZINC.		
In sheets	£26 0 0-	27 0 0

TIN.	
English blocks	96 0 0
Do., bars (in barrels)	97 0 0
Do., refined.....	99 0 0
Banca	92 0 0
Straits	89 10 0

TIN-PLATES.*	Per box.	
IC Charcoal, 1st qua.	1 6 0-	1 8 0
IX Ditto, 1st quality	1 12 0-	1 14 0
IC Ditto, 2d quality..	1 4 0-	1 6 0
IX Ditto, 2d quality..	1 10 0-	1 12 0
IC Coke.....	1 1 6-	1 2 6
IX Ditto	1 7 6-	1 8 6
Canada plates,p.ton..	13 10 0-	—
Ditto, at works	12 10 0-	—

IRON.	Per ton.	
Bars Welsh, in London	6 5 0-	—
Ditto, to arrive	6 5 0-	—
Nail rods	6 15 0-	7 0 0
" Staffd. in London	7 7 6-	8 10 0
Bars ditto	7 7 6-	8 10 0
Hoops ditto	8 7 6-	9 12 6
Sheets, single.....	9 2 6-10	0 0
Pig No. 1, in Wales ..	3 15 0-	4 5 0
Refined metal, ditto..	4 0 0-	5 0 0
Bars, common ditto..	5 7 6-	5 10 0
Do. mrch. Tyne or Tees	6 10 0-	—
Do., railway, in Wales	5 5 0-	5 10 0
Do., Swed. in London.	10 5 0-10	10 0
To arrive	10 5 0-10	10 0
Pig, No. 1, in Clyde ..	2 12 6-	2 17 9
Do. f.o.b. Tyne or Tees	2 9 6-	—
Do. Nos. 3, 4, f.o.b. do.	2 6 6-	2 7 0
Railway chairs	5 10 0-	5 15 0
" spikes 11	0 0-12	0 0
Indian Charcoal Pigs, in London p. ton..	7 0 0-	7 10 0

STEEL.	Per ton.	
Swed., in kegs(rolled)	14 5 0-	—
" (hammered)	15 5 0-15	10 0
Ditto, in faggots	16 0 0-	—
English, spring	17 0 0-23	0 0
QUICKSILVER (p. bottle)	6 17 0-	—

LEAD.	Per ton.	
English Pig, com.....	19 0 0-19	5 0
Ditto, LB.....	19 10 0-	—
Ditto, WB	21 10 0-	—
Ditto, sheet.....	20 0 0-20	5 0
Ditto, red lead	20 15 0-	—
Ditto, white	27 0 0-30	0 0
Ditto, patent shot....	22 10 0-23	0 0
Spanish.....	18 10 0-18	15 0

* At the works, 1s. to 1s. 6d. per box less.

REMARKS.—Very little alteration has taken place in the Metal Market during the past week, and it has remained much in the same condition as at last report, business being still in a very quiet state. Nevertheless, there does not seem any cause for despondency, as there appears to be a general impression that a better state of things will dawn upon us ere long, and that a return to activity in the metal trade may be looked for at no distant day. A few orders are still coming in, and, notwithstanding the quietness of the market, prices in several metals still maintain their firmness. Altogether the market does not look by any means unhealthy, and it may be fully expected that the present inactivity will speedily pass away, and be succeeded by a much greater amount of business, and a much more satisfactory condition of business generally. The intelligence recently received from the United States as to the disposition shown by the President to press upon this country the settlement of the so-called Alabama claims is not very encouraging, though the reports concerning the matter appear to have been somewhat exaggerated. Still, should the matter be urged, although it might only be done for electioneering purposes, yet it would be calculated to injure our commercial operations with America, which are on so extensive a scale, and are of so important a character. It is, therefore, to be hoped that nothing will occur in any way to interfere with the trade of the two countries, and that by the wisdom of the executives of both the United States and England we may be kept free from any interruption of our amicable relationship, and that the reciprocity of our commerce may remain undisturbed.

COPPER.—The advices from Chili state the charters for England in the previous 16 days to have amounted to 1400 tons copper, consisting of 600 tons ingots, 150 tons regulus, and the remainder bars. The market still remains steady, and prices continue firm. There has not, however, been much business done during the week.

IRON.—In Staffordshire orders continue of small amount, and the works are not turning out more than half their full production. The improved demand in some districts, which has resulted from the renewed activity of the shipbuilding trade, has not been shared in by South Staffordshire, where the trade list of prices, and the rate of wages, have not undergone any reduction. It is now not probable that any change will take place during the quarter, the larger ironmasters, who command the decision of the trade, preferring to wait the issue; meantime the smaller manufacturers are sorely pressed. In Welsh, the prospects at the works cannot be said to have changed, orders being, as a rule, scarce, and employment limited. From the American markets enquiries have slightly increased. In Swedish iron the demand is now only very limited. In Scotch pig-iron the market has been extremely quiet during the week, and little or no variation has occurred in prices, the last quotation received from Glasgow being 52s. 3d. cash.

LEAD.—A very good business is still doing, and prices remain very firm, with rather a tendency to advance.

TIN.—The market for Straits has been rather inanimate during the week, and the amount of business transacted has been very moderate. Sales to a limited extent have occurred at 89*l.* 10s. cash, at which, however, the market seems to be tolerably firm.

SPELTER.—Although no important transactions have occurred, holders are firm at 20*l.* 2s. 6d. on the spot, which may, therefore, still be considered the quotation.

TIN-PLATES.—The movement in the market is fairly supported, and the export buyers are now showing a disposition to enter into engagements. STEEL in rather better demand.

QUICKSILVER still commands a moderate sale.

A particularly dull week, made worse by temporary disappointments in the reports of Chontales and the Prince of Wales, has given the "bears" in the MINING SHARE MARKET an opportunity, since our last, of creating a species of panic in these particular shares, and of causing distrust and absence of business in most others. Up to Monday Chontales shares were at par to ¼ premium, when, on the arrival of the West India Mail, an announcement was made by the directors that cholera had revisited the mines immediately after the previous advices had been sent off, and, consequently, there was no remittance of gold. As no case of cholera had occurred, however, since December 24, the agents writing on January 7 express a hope that it had finally left the district. The doleful manner in which this information was given to the public, without one redeeming feature as to the state of the mines, which, after all, is the grand desideratum, had the effect of creating a panic, and shares receded 2*l.* each, in other words, the property was depreciated 90,000*l.*, whereas, had the directors at the same time informed the public that the reports from the mines were satisfactory, and that, although there was no remittance of gold, 300 tons of stuff had been crushed (but the gold had not been taken out of the pans, owing to the want of labour, &c.), and that with more labour the mines are now in a position to make monthly profits, we question if the shares would have had any such fall in price, and many of the holders who took alarm would have been saved great personal sacrifices. It is too often the fault with directors, particularly of mining companies, to be too glowing in their reports, but the Chontales directors of late appear to have erred the other way. Indeed, it is understood that the Chairman (Lord Nelson) objects to anything being published from the office having the slightest tinge of *couleur de rose*; and the consequence is the far worse mistake may be made of publishing what is bad, and withholding that which would, if also made public, in a great measure neutralise its effect. For, after all, the productiveness of the mines is the grand point, and even the worst enemies of the company do not deny the quantity of gold to be obtained; but they argue, and it is right this point should at once be taken up and grappled with, that owing to the heavy out lay in machinery, making roads, &c., the capital of the company may be exhausted before the great returns of gold can be made. This has been the argument of the "bears" for months past, and has been made the means of inducing many shareholders to sell out. Let us, therefore, look fairly into the mattter. We believe that had the cholera not again broken out, and if a good remittance of gold had arrived by this mail, even the necessity for a further call might have been avoided. As it is, the uncalled capital amounts to 13,000*l.*, a sum, we hope, that will be ample to tide over casualities which no human foresight could have prevented, and until the mines get into regular and profitable working. Even the next mail may bring a good remittance, and put the company right. If, however, the worst should happen, and the present capital prove insufficient, the remedy is not so difficult as it may at first sight appear. At present there are 30,000 shares, and if the number were at any time made up to 40,000 the 10,000 could be issued (*5l.* paid) *at a price to be agreed upon*, and offered *pro rata* to the present shareholders (say, one for every three), and which, *well assured of the richness of the mines*, they would only be too glad to take up. This would give the company more capital if needed, and enable immediate profits to be made. The shares have already recovered 10s., and leave off 3, 3¼.

Prince of Wales shares declined from 70s. to 52s. 6d., and after great fluctuations leave off 56s. to 58s.; the fall has been owing to adverse and persistent reports that the lode has been cut poor in the 65, by which a sort of panic was created in the shares. When the lode was first cut into in the 55, the same kind of reports were made, and the same fluctuations took place during the ten days or a fortnight that it took to cut through the lode, which was then 7 ft. wide. At present the lode in the 65 has only been cut into about 3 ft., composed of capel, quartz, and killas, with mundic and copper ore; and as the water has not been let down from above, the agents consider the south, or rich part of the lode, not yet cut. The 55 east continues worth full 70*l.* per fathom, and the 55 west has improved to 20*l.* per fathom. The sale of ore on Thursday, it will be observed, realised over 8*l.* 10s. per ton all round, and leaves a profit of 600*l.* on the month. North Roskear shares have advanced to 7, buyers. Clifford Amalgamated, 5¾ to 6: at the meeting, held on Wednesday, the accounts showed a loss of 162*l.* 17s. 4d. on the two months, and a balance in hand of 11*l.* 2s. 2d. Taking the prospects of the mines generally, the agents report they are now quite as well at Wheal Clifford district as they have been for years past, and there is every prospect of continuing so. Carn Brea, 23 to 24; Chiverton Moor, 5¾ to 6. Great Retallack, 2½ to 2¾: the lode in the shaft sinking below the 30 is 18 in. wide, worth 3 to 4 cwts. of silver-lead per fathom; the 30 south is 15 in. wide; the rise above this level is worth 10 cwts.; the 30 north is worth from 4 to 5 cwts. Wheal Grenville shares have been flat at 26s. to 28s.: the 100 west is worth 13*l.* per fathom, and a splendid looking lode; the 90 east is worth 10*l.* per fathom; the winze below the 90 is worth from 18*l.* to 20*l.* per fathom. Drake Walls, 10s. to 15s.; East Basset, 9 to 11; East Caradon, 4½ to 5; East Carn Brea, 1⅞ to 2⅛. Wheal Crebor, 1s. 6d. to 2s. 6d.: at the meeting, on Thursday, the accounts showed a balance of 106*l.* 4s. 5d. in hand, and liabilities over assets, after estimating for three months' costs in advance, of 269*l.* 0s. 9d. There are one or two favourable points in the mine, which will be prosecuted at a small cost. East Gunnislake and South Bedford, 2⅜ to 2⅝; East Lovell, 8¼ to 8¾; East Russell, 25s. to 30s.; Frontino and Bolivia, 14s. to 16s. Grambler and St. Aubyn has improved at the 48 west, where a winze has been just commenced, worth 1½ ton of copper ore per fathom. The 35 fm. level end, just over this, is worth nearly 1 ton per fathom. Great Laxey, 17½ to 18¼; Great South Tolgus, 16s. to 18s.; Great Wheal Vor, 19 to 20; Herodsfoot, 38 to 40; Marke Valley, 6⅜ to 6⅝; North Crofty, 2¾ to 2⅞; North Treskerby, 26s. to 28s.; Providence Mines, 27 to 28; South Condurrow, 8s. to 10s.; South Crofty, 9 to 11; South Frances, 23 to 25; South Grenville, 5s. to 7s.; St. Ives Consols, 6s. to 7s.; Stray Park, 3 to 3¼; Tincroft, 13 to 14½; West Caradon, 10 to 11; West Chiverton, 65 to 67½; West Drake Walls, 10s. to 12s. 6d.; West Frances, 30 to 35; West Prince of Wales, 9s. to 11s.; West Seton, 185 to 190; West Wheal Kitty, ⅜ to ¾; Wheal Buller, 17 to 19; Wheal Chiverton, 2¾ to 3¼; Wheal Mary Ann, 20½ to 21½; Wheal Seton, 80 to 85; Wheal Trelawny, 6 to 7; Wheal Uny. 28s. to 30s. Ebury, 1¼ to 1⅜; the lode in the shaft has greatly improved, now worth 2 tons to the fathom. Westminster, 5 to 5¼; Central Snailbeach, 1 to 1¼; East Snaefell, 1 to 1½. At Wheal Kitty (St. Agnes) meeting, on Tuesday, the accounts showed a profit on the three months' working of 290*l.* 16s. 8d., and a dividend of 2s. per share (429*l.* 10s.) was declared, leaving a balance in favour of the mine of 711*l.* 15s. In the shaft at Old Westminster the lode is reported to have improved to 1 ton per fathom.

In the Mining Market, on the Stock Exchange, great depression has pervaded both foreign and home securities during the past week; at the same time, a very large business has been done. St. John del Rey shares have fallen to the extent of 5*l.* on the receipt of the advices by the French mail, showing a loss for the month of December of 3183*l.*, at the same time advising the abandonment of the old mine, and recommending the sinking of a new shaft. Don Pedro shares, notwithstanding the announcement of a dividend of 5s. per share, have again receded a further ½ on the last report. Chontales shares, on receipt of the distressing advices received by the West Indian mail, receded to 2 dis., sellers, but have since recovered ½. The following are the closing quotations:—St. John del Rey, 15 to 17; Don Pedro, 2 to 2¼ prem.; Anglo-Brazilian, par to ⅛ prem.; Rossa Grande, par to ⅛ prem.; Pestarena, ⅜ to ½ dis. (1000 ozs. of gold are expected by the end of the month); Port Phillip, 1⅜ to 1½; Chontales, 1⅝ to 1⅞ dis.; Anglo-Italian, par to ¼ prem.; Anglo-Argentine, ¼ to ½ prem.; Frontino and Bolivia, 11-16ths to 13-16ths; Central American, ¼ dis. to par; English and Australian Copper, 11-16ths to 13-16ths (cum div.); Yudanamutana, 1⅛ to 1¼; Kapunda, 5-16ths to 7-16ths; New Quebrada, ⅜ to ⅝; Scottish Australian, 1 to 1⅛; United Mexican, 1¾ to 2, and enquired for. The reconstruction scheme of the Cobre Copper Mining Company has been most favourably received, and the directors have agreed to take up 7000*l.* of the new capital. British Mines have been largely dealt in. West Chiverton close 65 to 67; no change is reported in the workings; the meeting is called for the 28th. Chiverton, 2¾ to 3¼; Chiverton Moor, 5¾ to 6; Great Laxey steady, at 17½ to 18; Great Vor, 18¾ to 19¼; North Crofty, 2¾ to 3; New Lovell, ⅛ to ¼; North Chiverton, 4¼ to 4½; Prince of Wales have partially recovered, and close 56s. to 57s. North Wales Mines are firm. Maes-y-Safn shares have been dealt in at 28 to 29; Minera, 180 to 200; Westminster (Limited), 5 to 5¼; Glan Alun, 6s. to 7s., and likely to take an important position. At Old Westminster, the lode in the 92 east is worth 1 ton of lead ore per fathom.

IRISH MINE SHARE MARKET.—The disposition to make speculative purchases has been more than ordinarily vacillating during the last fortnight, having been favourably and adversely influenced in quick succession by the *on dits* on continental, American, and home political, as well financial and commercial affairs. In such an (so to say) unsettled state of business on our Stock Exchange it was natural that shares of merely progressive mines should have been neglected; and that, on the other hand, those of well-developed undertakings should be largely dealt in, at prices considerably affected by the supposed prospects of improved or diminished dividends at the close of the respective account half-years. Thus, the shares of the Mining Company of Ireland (7*l.* paid), the profits of which are in a great measure derived from the produce of lead and copper ores, have continued to improve, and realised an advance since the 12th inst. from 18*l.* per share to 18*l.* 7s. 6d. cash, and 18*l.* 10s. for time, and been occasionally largely dealt in, leaving off in good request at the latter quotations. Wicklow Copper Mining Company's shares, on the other hand, have been somewhat depressed, in consequence of some doubt as to the stability of the market for sulphur or iron pyrites, although the mines never looked better for quantity and qualtity of this their chief produce. They were for some days steady at 16*l.* 10s. per share (2*l.* 10s. paid), but at last purchases could be effected at 16*l.* 5s., with sometimes a blank in transactions, owing to the best informed and most substantial shareholders refusing to accept reduced prices, at which otherwise an animated business might be done. This was, to a great extent, unfavourably influenced by the public statement made by the Chairman of the Dublin, Wicklow, and Wexford Railway Company, at their recent general meeting, to the effect that the largest falling off in their receipts was under the head of "minerals," which represented about 6000 tons less carried than during the corresponding period of the previous year, explaining at the

same time that he was informed about 15,000 tons (nearly all iron pyrites) are now lying at the mines and at their sidings of the railway, waiting a revival of the (sulphur) trade; so that the revenue from this source was not lost, but only deferred. But the general prosperity of the Wicklow and adjoining districts does not appear to have suffered much, since the same railway has had an increase during the year of 2700*l.* on passenger traffic, representing 48,000 passengers, and is now able, after setting apart 10,000*l.* for contingencies, to provide for the dividend on the 6 per cent. preference stock, and to pay 3 per cent. on account of dividend payable on the 5 per cent. preference stock, with secure prospects of having the balance paid very soon. Connorree Mining Company shares have gone back heavily, being easily procurable at 2s. to 2s. 6d. Carysfort shares, though under the cloud of a serious misunderstanding among the shareholders, still find buyers, but at the greatly reduced figure of 2s. 6d. to 3s. per share. General Mining Company for Ireland shares have just changed hands at the previous quotation of 2*l.* 5s.; but those of the Killaloe Slate Quarry, and even Cape Copper, have been passed over altogether.

A company is in course of formation for working the WEST DEVON CONSOLS MINE, which is situated immediately to the west of and upon the same line of lodes as the Devon Great Consols. The promoters have adopted the old Cornish system of dividing the mine into a small number of shares, there being 50 of 100*l.* each, so that every shareholder enters the enterprise upon equal terms. Men of the greatest experience in practical mining, and in the highest official position in connection with mining enterprise, have given an unqualified judgment in favour of the undertaking. Mr. James Richards, the managing agent; Mr, Joseph Richards, the surveyor; and Mr. J. H. Hitchins, the consulting engineering of Devon Great Consols, have favourably reported upon the mine. Mr. James Richards stated that "From the close proximity of this mine to the Devon Great Consols, the similarity of the country, the cross-courses passing through it, and the size and character of the lodes, I am led to form a most favourable opinion of this property, and if fairly developed there can be but little doubt that a good and profitable mine will be the result." Mr. J. H. Hitchins believes that "The West Devon Consols will be a permanently profitable investment, if carried out in a judiciously energetic manner under the advice and direction of a well qualified superintendent, by which I mean a sufficiently well experienced mining agent, possessing a good discrimination and sound practical judgment."

At Truro Ticketing, on Thursday, 3745 tons of ore were sold, realising 16,734*l.* 17s. 6d. The particulars of the sale were:—Average standard, 113*l.* 6s.; average produce, 6⅜; average price per ton, 4*l.* 9s. 6d.; quantity of fine copper, 238 tons 11 cwts. The following are the particulars of the sales during the past month:—

Date.	Tons.	Standard.	Produce.	Per ton.	Per unit.	Ore copper.
Jan. 23....	4249	£116 9 0	5⅜	£3 17 0	13s. 7d.	£68 0 0
„ 30....	2148	101 9 0	7⅝	5 5 0	13 5½	67 3 0
Feb. 6....	3043	108 8 0	6⅛	4 4 6	13 1½	65 12 6
„ 13....	2175	109 7 0	6¾	4 3 6	13 2	65 17 0
„ 20....	3745	113 6 0	6⅜	4 9 6	14 0½	70 3 0

Compared with last week's sale, the advance has been in the standard 2*l.*, and in the price per ton of ore about 2s. 6d. Compared with the corresponding sale of last month, the advance has been in the standard 2*l.*, and in the price per ton of ore about 2s. 6d.

At the Swansea Ticketing, on Feb. 11, the 2015 tons of ore, sold for 21,417*l.* 9s., contained but 304¾ tons of fine copper, and *not* 344¾ tons, as stated last week; consequently, in making the comparison with the preceding sale, it should have been stated that a rise had taken place, and not a fall. The particulars of the two last sales were:—

Date.	Tons.	Standard.	Produce.	Price per ton.	Per unit.	Ore copper.
Jan. 21.. 1866	£91 6 0	19	£13 5 4	13s. 11½d....	£69 17 0	
Feb. 11..	2015	92 10 6	15⅛....	10 12 6	14 0½....	70 5 0

Compared with the previous sale, the advance was, therefore, about 18s. in the standard, and 2s. 9d. per ton of ore.

At Wheal Kitty (St. Agnes) meeting, on Tuesday (Mr. T Reece in the chair), the accounts for the three months ending November showed a credit balance of 1141*l.* 8s. The profit on the three months' working was 290*l.* 16s. 8d. A dividend of 429*l.* 10s. (2s. per share) was declared, and 711*l.* 15s. carried to credit of next account. Capts. Teague, Polkinghorne, and Davey reported that during the driving of the last 2 fathoms on the Vottle lode in the 24 fm. level a decided improvement has taken place in the character of the lode, which is now 2 feet wide, and worth for tin full 6*l.* per fathom—a very kindly lode. The tribute pitches continue to yield their usual quantity of tin, nor is there much falling off, so that they hope to go on raising from 45 to 50 tons per quarter, for a considerable time to come.

At Wheal Crelake meeting, on Wednesday (Mr. M. Bawden in the chair), the accounts for the four months ending November showed—Ore sold and other receipts, 2995*l.* 11s. 7d.—Balance last audit, 136*l.* 16s. 5d.; mine costs and merchants' bills, 2335*l.* 3s. 4d.: leaving credit balance, 523*l.* 11s. 10d. The agents' report and other particulars will be given next week.

At North Chiverton Mine meeting, on Thursday (Mr. G. Noakes, F.G.S., in the chair), the accounts made up to the present time showed a credit balance of 2207*l.* 14s. Details in another column.

At Wheal Crebor general meeting, on Thursday (Mr. H. Emanuel in the chair), the statement of accounts showed a cash balance of 106*l.* 4s. 5d., and a balance of liabilities over assets, after estimating the three months' cost, of 269*l.* 0s. 9d. A call of 1s. per share was made. Capt. Gifford's report will be found amongst our Mining Correspondence.

At the English and Australian Copper Company meeting, on Thursday (Mr. R. A. Routh in the chair), the directors' report was unanimously adopted, a dividend of 1s. per share was declared, and the retiring directors and auditor re-elected. Details in another column.

The Bank of England return for the week ending on Wednesday evening showed in the ISSUE DEPARTMENT a decrease in the "notes issued" of 490,543*l.*, which is represented by a corresponding decrease in the "coin and bullion" on the other side of the account. In the BANKING DEPARTMENT there is shown a decrease in the "public deposits" of 657*l.*, and in the "other deposits" of 1,035,401*l.*: together, 1,041,972*l.*; an increase in the "rest" of 20,139*l.*, and in the "seven day and other bills" of 4224*l.*: together, 24,363*l.*=1,017,609*l.* On the other side of the account there is shown a decrease in the "Government securities" of 500,000*l.*, and in the "other securities" of 233,953*l.*=733,953*l.*: leaving a decrease in the total reserve of 283,656*l.*

On the Stock Exchange transactions to a considerable extent have been effected in Mining Shares during the week. The following prices were officially recorded in British Mining Shares:—Chiverton, ⅜; Marke Valley, 6 1-16th, 6¼, 6¼; Tincroft, 13½, 13¾; Great Laxey, 17½; Prince of Wales, 3, 2¾.—In Colonial Mining Shares the prices were:—Cape Copper, 9⅝, 9¾, 9¼; Port Phillip, 1 7-16th, 1½, 1⅝, 1⅞; Yudanamutana, 1⅝, 1¾, 1½, 1¾, 1 11-16th, 1¾, 1⅝; Fortuna, 2, 13-16ths Scottish Australian, 1 1-16th.—In Foreign Mining Shares the prices were:—Chontales, 4⅜, 3⅜, 3 5-16th, 3½, 3, 2¾, 2 13-16th, 2⅞; Don Pedro, 2¼, 2¼, 2, 1 13-16th, 2 1-16th, 2⅛, 2 prem.; Frontino and Bolivia, 11-16th, ⅝, ⅝, 15-16th; St. John del Rey, 21½, 21¾, 21, 22, 19¾, 18, 17, 16½, 15¼, 15¾; United Mexican, 1¾, 1⅞, 1⅝; Pestarena, 2½; Passa Grande, par.

COAL MARKET.—The fresh arrivals this week number 123 ships The extraordinary mildness of the season continues to have a most depressing effect upon the trade in house coals, and business has ruled heavy at a reduction of from 6d. to 1s. per ton on the low prices last quoted. Haswell Wallsend, 16s. 9d.; Hartlepool Wallsend, 16s. 3d.; East Hartlepool Wallsend, 16s.; Kelloe Wallsend, 14s. 9d.; Eden Main, 14s. 9d.; Trimdon Grange Wallsend, 13s. Unsold 19 cargos: 10 ships at sea.

EXPORTS OF COAL.—By the Monthly Circular of Messrs. Higginson, Liverpool, we learn that the quantity of coal exported in Jan. was 594,451 tons, against 515,560 tons in the corresponding month of 1867, showing an increase of 78,891 tons. The particulars are—From the Northern Ports, 231,840 tons; Yorkshire, 28,686 tons; London, 46,593 tons; Liverpool, 3016 tons; Severn Ports, 245,759 tons; and Scotch Ports, 38,557 tons. The increase was—Northern Ports, 27,389 tons; Yorkshire, 12,450 tons; London, 17,517 tons; Severn Ports, 22,093 tons; and Scotch Ports, 738 tons. The decrease—Liverpool, 1296 tons.

COAL MINING.—In the House of Commons, on Wednesday, Mr. Neate asked the Secretary of State for the Home Department whether it was his intention to bring in a Bill for the regulation of coal mines, founded on the report of the Committee on that subject, which was presented last session; and whether, in deference to the recommendations of that Committee, he has exercised, or whether he intended to exercise the power which he now possessed of appointing additional Inspectors of Coal Mines?—Mr. Hardy said he was not in a position to answer the first part of the question, as to whether it was his intention to bring in a Bill. He was at present in communication with persons interested in the subject, but he could not say whether he would introduce a Bill for the regulation of coal mines or not. As to the appointment of additional Inspectors, that matter was in abeyance, but he was not prepared to appoint such a number of Inspectors as would take away from the proprietors the charge of their mines, and place a great responsibility upon the Government as to the due working of the mines. All that he was disposed to do was to appoint such a number as was sufficient to see that proper care was used in working mines.

COAL IN WILTSHIRE.—It is reported that a discovery of coal has been made on the estate of Earl Manners, near Trowbridge, Wilts, and that boring operations are forthwith to be commenced, with a view to ascertain the extent and value of the seam. This announcement will be received with satisfaction by those who maintain the opinion that coal exists beneath the southern counties of England.

TO MINING COMPANIES.—The Owner of an ESTATE in IRELAND, which contains some peculiarly RICH VEINS of LEAD ORE, is PREPARED to RECEIVE PROPOSALS from MINING COMPANIES and others, and to GRANT a LEASE of such portions of his PROPERTY as would be REQUIRED for the WORKING of these MINES. The locality in which the ore is found is within three miles of a railway station, and seven miles of a sea port on the East coast.
Labour is cheap and abundant in the neighbourhood, and the owner has a large quantity of timber near the spot suitable for mining purposes.
For further particulars, apply to WILLIAM A. TISDALL, Esq., Tullacoey, Moy, Ireland. 48

TO CAPITALISTS, of moderate means, seeking a JUDICIOUS and SAFE INVESTMENT to the extent of £5000.—A COLLIERY, in one of the best producing districts: is now in excellent working order to the extent of its present capabilities. Pits are at this time at work, and yielding large monthly returns. A considerable sum has been expended to bring the colliery up to its present state of efficiency. By the introducton of the above amount, expended upon the necessary machinery to bring more produce to surface, returns far in excess of those corresponding to what has already been produced upon the amount laid out must be the inevitable result. To those having the sum named at their own immediate command every explanation will be afforded; but it must be distinctly understood, with a view to avoid unnecessary trouble, that principals only will be treated with, and satisfactory evidence then must be given that the amount above mentioned is within their own immediate control.
Apply, by letter, to "C. J. P.," care of J. J. Peddell, Esq., solicitor, 63 Basinghall-street, E.C. 47

TO CAPITALISTS.—A COLLIERY for DISPOSAL, or a PARTNERSHIP. An EXCELLENT INVESTMENT.
For particulars, apply to "A. B.," care of R. J. Lecky, Esq., 190, Westminster Bridge-road, London, S. 49

TO COAL AGENTS.—WANTED, at a Steam Coal Colliery at Aberdare, AN AGENT for the MANAGEMENT of a COLLIERY capable of producing 400 tons per day. Good references will be required. Thoroughly competent and experienced men only need apply. A liberal salary will be given.
Applications to be addressed, by letter, to "A. Z.," Post-office, Aberdare, on or before 1st March. 46

TO ENGINEERS, &c.—A Gentleman of experience, who has for some years had the MANAGEMENT of a LARGE ENGINEERING WORKS, MANUFACTURING STEAM and other MACHINERY, RAILWAY PLANT, including WHEELS and AXLES, &c., &c., DESIRES TO CHANGE, and will be GLAD to MAKE a RE-ENGAGEMENT.
Address, "F. B.," MINING JOURNAL Office, 26, Fleet-street, London, E.C. 64

TIN, SPELTER, &c.—A Gentleman, who has represented for many years a FIRST-CLASS COPPER HOUSE in BIRMINGHAM, is DESIROUS of ADDING to his PRESENT (only) AGENCY of COPPER, ONE of TIN, SPELTER, &c.
Address—"J.," care of Messrs. W. H. Smith and Son, Union-street, Birmingham. 45

SECRETARY WANTED.—A Gentleman, with convenient London offices, is REQUIRED to UNDERTAKE the SECRETARYSHIP to ONE or MORE MINING COMPANIES, and to otherwise act in conjunction with a mining office conducting the local management of mines in a district much in repute.
Address, "Unity," MINING JOURNAL Office, 26, Fleet-street, London, E.C. 60

A PARTNER WANTED, to join a Firm, who can, if required, speculate from £300 to £400 to SEARCH for GOLD in one of the most promising lodes in NORTH WALES, about three miles north of the Clogau Gold Mine.
For particulars, apply to Mr. SAMUEL FERNELL, Main Offeran Slate Quarry, Dolgaridu, Festiniog, North Wales. 62

WANTED, an ENGAGEMENT as SURVEYOR in COAL or METALLIC MINES. Willing to assist in the office. First-class testimonials.
Address, "M. W. M.," MINING JOURNAL Office, 26, Fleet-street, London, E.C. 58

WANTED, to PLACE a YOUNG MAN where he could LEARN thoroughly LAND and MINE SURVEYING.
Apply, with full particulars, to Box 32, Post-office, Wrexham. 49

WANTED, FOUR THOUSAND POUNDS, upon SECURITY of an EXCELLENT COLONIAL COLLIERY.
Apply, with real name and address, to J. H. HOWARD, Esq., solicitor, 4, Quality-court, Chancery-lane. 53

FOR SALE, in good condition, a CONTRACTORS' LOCOMOTIVE. The usual narrow gauge, and by a well-known maker.
For particulars, apply to the Engineer, A. HEALEY and Co., Blaina Ironworks, near Newport, Monmouthshire. 61

NOTICE.—GREAT CWMSYMLOG MINE.—SIR,—I beg to inform you that the Chancery proceedings in connection with this company had been settled, and orders forwarded to the sheriff to withdraw from possession, prior to the publication of the advertisement which appeared in last week's Journal. T. SPARGO, Manager.
224 and 225, Gresham House, E.C. 52

GREAT CWMSYMLOG MINE.—THIS SALE, which was advertised to take place on the 25th day of February inst., is POSTPONED.—Sheriff's Office, Cardigan, Feb. 18, 1868. 55

AUSTRALIAN UNITED GOLD MINING COMPANY
(LIMITED).
Capital £50,000, in 20,000 shares of £2 10s. each
5s. per share payable on application, and 15s. on allotment.
Where no allotment is made the deposit will be returned in full.
Power will be taken for shareholders to pay up in full in advance, and receive "Share Warrants to Bearer." Interest to be allowed as may be agreed on with the directors.
BANKERS.
IN LONDON.... THE LONDON AND WESTMINSTER BANK, LOTHBURY.
IN AUSTRALIA. THE BANK OF VICTORIA.
BROKERS.
Messrs. ALEXANDER and Co., 7, Tokenhouse-yard.
This company has been formed for purchasing and working the Central and Duke of Cornwall Mines, in Australia, which have been selected by Mr. Kitto, Government Mining Surveyor of Victoria, because of their advanced development and ascertained value, requiring machinery only—which it is the object of this company to supply—to ensure immediate dividends. They are situate in the celebrated Victoria gold mining district, and in similar auriferous stratification as the following mines:—

Name of mine.	Subscribed capital.	Dividends up to Nov., 1867.
Cosmopolitan	£ 5,986 0 0	£123,944 5 0 in 6 years.
Koh-i-noor	10,000 0 0	249,260 0 0 in 6 years.
United Band of Hope....	32,600 0 0	161,600 0 0 in 3¼ years.
Great Redan	9,800 0 0	339,250 0 0 in 7 years.
Sir W. Don	2,600 0 0	130,500 0 0 in 2 years.
Newington Freehold	6,000 0 0	45,000 0 0 in 14 months.
Western Freehold	6,000 0 0	25,500 0 0 in 8 months.
Defiance	5,563 0 0	70,000 0 0 in 7 years.
Nelson and Wellington..	18,653 0 0	167,357 0 0 in 6 years.
Albion	18,000 0 0	90,921 5 0 in 4 years.
Prince of Wales	18,795 0 0	131,567 1 0 in 5 years.
Buningyong	12,000 0 0	139,007 14 10 in 3 years.
Totals	£145,382 0 0	£1,878,907 5 10

Full prospectuses, with names of directors, &c., forms of application, and information of the brokers, or at the offices of the Mining Association, 8, Austinfriars, E.C.
Applications for the remaining shares will be received until Saturday, 29th February instant. 54

ANALYSES OF COAL, CANNEL, MINERAL OILS, and all OIL PRODUCING MINERALS are UNDERTAKEN by A. NORMAN TATE, F.A.S.L., &c.,
ANALYTICAL and CONSULTING CHEMIST, and CHEMICAL ENGINEER (Author of "Petroleum and Its Products," &c.),
MOLD, NORTH WALES.
Plans and estimates for oil and chemical works prepared, and their erection superintended.
Assays of metals and their ores carefully conducted. 57

PIG LEAD.
MESSRS. WESTON AND COLLINGBORN SOLICIT ORDERS for SOFT PIG LEAD, which they are producing of the very best quality. Prices on application.
WORKS,—SWINFORD, GLOUCESTERSHIRE.
OFFICE,—18, PETER STREET, BRISTOL. 56

STEAM-BOILERS made by WILLIAM WILSON, LILYBANK BOILER WORKS, GLASGOW, on the most improved principles, for home and export. All boilers made of the best material and workmanship, proved and warranted tight under a high pressure, and delivered at any railway station or shipping port in the kingdom at moderate rates. Lithograph of boilers forwarded post-free on application. 51

NICHOLLS, MATHEWS, AND CO., ENGINEERS,
BEDFORD IRONWORKS, TAVISTOCK.
MANUFACTURERS of STEAM ENGINES of EVERY DESCRIPTION, made on the BEST and NEWEST PRINCIPLES. We beg more especially to call the attention of the public to the MANUFACTURE of our BOILERS, which have been tested by most of our leading engineers. PUMP WORK CASTINGS of EVERY DESCRIPTION, both of brass and iron. HAMMERED IRON and HEAVY SHAFTS of ANY SIZE. CHAINS made of the best iron, and warranted. MINERS' TOOLS and RAILWAY WORK of EVERY DESCRIPTION.
ALL ORDERS FOR ABROAD RECEIVE their BEST ATTENTION. NICHOLLS, MATHEWS, and Co. have had 20 years' experience in supplying machinery to foreign mines, and selecting experienced workmen to erect the same, where required.
Messrs. NICHOLLS, MATHEWS, and Co. have always a LARGE STOCK of SECOND-HAND MINE MATERIALS in stock, and at moderate prices. 58

WILLIAMS'S PERRAN FOUNDRY COMPANY,
PERRANARWORTHAL, CORNWALL.
MANUFACTURERS of STEAM PUMPING and EVERY OTHER KIND of ENGINES, together with BOILERS, PUMP CASTINGS, and MINING TOOLS of every description, of the very best quality. Estimates given for the supply of any amount of machinery.
London Agent.—Mr. EDWARD COOKE, 76, Old Broad-street, London, E.C. 59

RAILWAY CARRIAGE COMPANY (LIMITED)
ESTABLISHED 1847.
OLDBURY WORKS, NEAR BIRMINGHAM.
MANUFACTURERS of RAILWAY CARRIAGES and WAGONS, and EVERY DESCRIPTION of IRONWORK.
Passenger carriages and wagons built, either for cash or for payment over a period of years.
RAILWAY WAGONS FOR HIRE.
CHIEF OFFICES,—OLDBURY WORKS, NEAR BIRMINGHAM.
LONDON OFFICES,—6, STOREY'S GATE, GREAT GEORGE STREET, WESTMINSTER. 60

THE BIRMINGHAM WAGON COMPANY (LIMITED)
MANUFACTURE RAILWAY WAGONS of EVERY DESCRIPTION, for HIRE and SALE, by immediate or deferred payments. They have also wagons for hire capable of carrying 6, 8, and 10 tons, part of which are constructed specially for shipping purposes. Wagons in working order maintained by contract.
EDMUND FOWLER, Sec.
WAGON WORKS,—SMETHWICK, BIRMINGHAM.
*** Loans received on Debenture; particulars on application.
London Agent—Mr. E. B. SAVILE, 67, Victoria-street, Westminster, S.W. 61

STAFFORDSHIRE WHEEL AND AXLE COMPANY (LIMITED),
MANUFACTURERS of RAILWAY CARRIAGE, WAGON, and CONTRACTORS' WHEELS and AXLES, and other IRONWORK used in the CONSTRUCTION of RAILWAY ROLLING STOCK.
OFFICES AND WORKS,
HEATH STREET SOUTH, SPRING HILL, BIRMINGHAM.
LONDON OFFICE,—118, CANNON STREET, E.C. 62

LEAD ORES.

Date.	Mines.	Tons.	Amount.	Purchasers.
Feb. 15—	Plynlimmon	40	£11 7 6	Burry Port Company.
17—	Bronfloyd United	55	12 0 6	Weston and Co.
——	Gothic	11¼	11 8 0	Sims, Willyams, & Co.
18—	Stiperstones	70	11 8 6	Walker, Parker, & Co.

BLACK TIN.

Date.	Mine.	Ts. c. q. lbs.	Price p. ton.	Amount.	Purchaser.
Feb. 14—	Prosper United..	7 10 2 7 ..	£52 15 0 ..	£ 397 2 2—	Mellanear.
—	ditto	0 19 3 18 ..	40 0 0 ..	39 16 4—	ditto
15—	Kitty (St. Agnes)	12 6 3 10 ..	— ..	651 0 9—	—
—	Penhalls	14 2 0 12 ..	— ..	758 3 3—	—
18—	Great Wh. Vor ..	54 5 3 20 ..	— ..	3023 7 6—	—
—	Kitty (St. Agnes)	14 0 1 26 ..	— ..	739 15 5—	—

THE COPPER TRADE.

Messrs. Turnbull and Watson (Feb. 14) write—The sales since our last have been as follows:—

Mine or ship.	Tons.	Price.	Mine or ship.	Tons.	Price.
Reg.—Glamorgan..	700 ..	0 14 1½	Bars—To arrive ..	90 ..	£69 10 0
Bars—To arrive....	60 ..	70 0 0	Ing.—Star of West..	60 ..	73 10 0
Reg.—Glenudal....	300 ..	0 14 0	Reg.—Pr. of Thames	250 ..	0 14 0
Reg.—San Jose	275 ..	0 14 0	Ing.—Star of West.	40 ..	73 0 0
Ores—Carmelita ..	833 ..	0 14 1	Ing.— ditto	50 ..	73 10 0
Ores—Californian..	269 ..	0 13 10½	Reg.—To arrive....	300 ..	0 14 3
Ores—Chilian.....	260 ..	0 14 0	Ores—Average	2015 ..	0 14 0½
Reg.—Chilian	565 ..	13 11 0	Ing.—Malpeo.....	60 ..	74 0 0

The total stocks of copper of all kinds, including English, in Liverpool, London, Swansea, and Havre, is estimated as follows in fine copper:—

Feb. 1, 1868..	Tons 19,692	Feb. 1, 1867..	Tons 18,731
Feb. 1, 1866..	Tons 19,271	Jan. 1, 1868	19,833
Dec. 1, 1867	19,870		

Quotations for Chili bars, ores and regulus, and English tough cake—

	Feb. 1, 1868.	Feb. 1, 1867.	Feb, 1, 1866.
Tough	£73 0 0	£83 0 0	£95 0 0 per ton.
Bars	69 0 0	76 0 0	90 0 0 per ton.
Ores and regulus ..	0 14 0	0 15 3	0 17 3 per unit.

Stocks of copper produce (Chilian and Bolivian):—

	Ores.	Regulus.	Bars.	Ingots.	Barilla.
Liverpool	2815	1498	4710	867	397
Swansea	1067	700	200	816	63
Havre	—	—	3780	430	—
Total	3252	2198	8690	2113	460

Equal to 12,425 tons in fine copper.

Arrivals from the West Coast, South America, during the past fortnight:—Serena, Tortoralillo, 302 tons bars; San Carlos, Tocopilla, 121 tons ores, 490 tons regulus, 31 tons barilla; Oriente, Valparaiso, 10 tons regulus, 150 tons bars. At Swansea—Magnet, Caldera, 700 tons regulus; River Clyde, Carrizal, 300 tons ores, 400 tons regulus; William Leckie, Chanaral, 200 tons bars; Lord Marmion, Coquimbo, 150 tons ingots.

COPPER ORES.

Sampled Feb. 5, and sold at the Royal Hotel, Truro, Feb. 20.

Mines.	Tons.	Price.	Mines.	Tons.	Price.
Devon Great Consols.	135	£4 16 0	Okel Tor	84	£1 17 6
ditto	130	4 12 6	ditto	66	1 15 6
ditto	128	5 4 0	ditto	46	7 3 6
ditto	123	4 6 0	Gawton	81	2 16 0
ditto	118	4 0 6	ditto	77	2 14 0
ditto	115	4 19 6	ditto	73	2 14 6
ditto	114	5 3 0	ditto	40	1 14 6
ditto	113	4 14 0	ditto	16	4 19 0
ditto	112	3 13 6	Brookwood	72	2 0 6
ditto	100	4 10 6	ditto	63	4 4 6
ditto	96	5 2 0	ditto	56	4 1 6
ditto	84	4 18 6	ditto	47	3 5 6
ditto	82	5 2 6	ditto	29	10 5 0
ditto	74	4 11 6	East Caradon.....	90	4 6 6
ditto	64	2 12 6	ditto	70	4 8 0
ditto	59	2 7 0	Prince of Wales.....	54	7 4 6
ditto	51	3 3 0	ditto	50	9 16 0
ditto	42	4 14 6	ditto	37	8 16 6
ditto	37	14 1 0	Wheal Crebor.....	53	3 7 0
ditto	35	3 4 0	ditto	49	4 8 0
ditto	18	4 1 6	Wheal Friendship ..	40	7 10 6
Marke Valley	89	3 0 6	ditto	32	6 19 0
ditto	70	7 2 6	Gonamena	20	6 5 0
ditto	69	6 15 0	ditto	19	2 18 6
ditto	65	3 13 6	Caradon Consols	30	3 19 6
ditto	60	3 13 6	Craddock Moor	30	6 3 0
ditto	55	1 12 0	Sortridge Consols	22	3 10 0
ditto	42	2 9 6	Fursdon	11	8 0 6
Okel Tor	104	3 10 6	Old Gunnislake	4	7 5 6

TOTAL PRODUCE.

Devon Great Con.	1830	£8506 3 6	Wh. Friendship..	72	£ 523 8 0
Marke Valley....	450	1885 1 0	Gonamena	39	180 11 6
Okel Tor	500	971 6 0	Caradon Consols..	30	119 5 0
Gawton.....	287	781 16 6	Craddock Moor ..	30	184 10 0
Brookwood	267	1091 7 0	Sortridge Consols	22	77 0 0
East Caradon....	160	697 5 0	Fursdon	11	88 5 6
Prince of Wales..	141	1206 13 6	Old Gunnislake ..	4	29 2 0
Wheal Crebor....	102	393 3 0			

Average standard ..... £113 6 0 | Average produce 6⅜
Average price per ton £4 9 6
Quantity of ore ..... 3745 tons | Quantity of fine copper.. 238 tons 11 cwts.
Amount of money £16,734 17 6
LAST SALE.—Average standard ..... £109 7 0—Average produce 6⅜
Standard of corresponding sale last month, £116 9 0—Produce, 5⅞.

COMPANIES BY WHOM THE ORES WERE PURCHASED.

Names.	Tons.	Amount.
Vivian and Sons	939½	£3377 10 3
Freeman and Co.	139	964 10 0
Grenfell and Sons	239½	1174 6 0
Sims, Willyams, and Co.	641½	3572 10 3
Williams, Foster, and Co.....	764½	3249 8 3
Mason and Elkington.....	440½	2143 12 0
Bankart and Sons	59	138 13 0
Copper Miners' Company	59	287 8 6
Charles Lambert	190	708 10 0
Sweetland, Tuttle, and Co.	272½	1118 9 3
Total	3745	£16,734 17 6

Copper ores for sale at Tabb's Hotel, Redruth, on Thursday next—Mines and Parcels.—South Caradon 529—Great North Downs 460—West Wheal Damsel 238—Clifford Amalgamated 176—Phœnix Mines 156—Feock Regulus 67—Tywarnhaile 8.—Total, 1634 tons.

Copper ores for sale at Tabb's Hotel, Redruth, on Thursday week—Mines and Parcels—Clifford Amalgamated 722—West Wheal Seton 572—South Wheal Frances 228—East Pool 158—South Crofty 121—Carn Camborne 103—Wheal Basset 102—Tincroft 60—North Grambler 39—North Crofty 27—North Roskear 21—Pendarves United 19.—Total, 2172.

WATSON BROTHERS' MINING CIRCULAR.

WATSON BROTHERS,
MINING AGENTS, STOCK AND SHARE DEALERS, &c.
1, ST. MICHAEL'S ALLEY, CORNHILL, LONDON.

MESSRS. WATSON BROTHERS beg to notify to their friends and the public generally that Mr. W. H. CUELL has retired from the firm, in accordance with a clause in the deed of partnership; and having also sold to the remaining partners all his right, property, and interest in the business hitherto carried on by J. Y. WATSON, F.G.S., NAPOLEON FREDERICK WATSON, and himself, under the name of "WATSON and CUELL," the same will be carried on in future by Mr. J. Y. WATSON and Mr. N. F. WATSON, under the designation of "WATSON BROTHERS," and they take this opportunity to return their most sincere thanks for the great patronage bestowed and confidence reposed in the firm for 24 years, and to assure their friends and clients it will be their earnest endeavour to merit a continuance of both.

Messrs. WATSON BROTHERS have made arrangements for continuing their weekly Circular, which has had a large circulation for many years, to the columns of the *Mining Journal*, their special reports and remarks upon mine and mining, and state of the share market, will in future appear in this column

In the year 1843, when Cornish mining was almost unknown to the genera public, attention was first called to its advantages, when properly conducted, in the "Compendium of British Mining," commenced in 1837, and published in 1843, by Mr. J. Y. WATSON, F.G.S., author of "Gleanings among Mines and Miners," "Records of Ancient Mining," "Cornish Notes" (first series, 1862), "Cornish Notes" (second series, 1863), "The Progress of Mining," with statistics of the Mining Interest, annually for 21 years, &c., &c. In the Compendium, published in 1843, Mr. WATSON was the first to recommend the system of a "division of small risks in several mines, ensuring success in the aggregate," and Messrs. WATSON BROTHERS have always a selected list on hand. Perhaps at no former period in the annals of mining has there been more peculiar need of honest and experienced advice in regard to mines and share dealing than there is at present; and, from the lengthened experience of Messrs. WATSON BROTHERS they are emboldened to offer, thus publicly, their best services to all connected with mines or the market, as they have for so many years done privately, through the medium of their own Circular.

Messrs. WATSON BROTHERS transact business in the purchase and sale of mining shares, and other securities, payments of calls, receipt and transmission of dividends, obtaining information for clients, and affording advice, to the best of their knowledge and judgment, based on the experience of more than 30 years active connection with the Mining Market.

Messrs. WATSON BROTHERS also inform their clients and the public that they transact business in the public funds, railway, docks, insurance, and every other description of shares dealt in on the Stock Exchange.

Messrs. WATSON BROTHERS are also daily asked their opinion of particular mines, as well as to *recommend* mines to invest or speculate in, and they give their advice and recommend mines to the best of their judgment and ability, founded on the best practical advice they can obtain from the mining districts, but they will not be held responsible, nor subject to blame, if results do not always equal the expectations they may have held out in a property so fluctuating as mining.

Messrs. WATSON BROTHERS having agents and correspondents in all the mining districts, and an extensive connection among the largest holders of mining property, have the more confidence in tendering their advice on all matters relating to the state and prospects of mines and mining companies, and are able to supply shares in all the best mines at close market prices, free of all charge for commission.

PRINCE OF WALES—"A." (Birmingham).—The object of issuing such reports is so obvious that we are surprised anyone is deceived by them. It is only the old story over again. Our readers will remember that, before the lode was cut in the 55 fm. level some of the first agents in Cornwall were sent to inspect, and their reports almost condemned the 55—"Ore could not live in the country, and it was getting poorer as it got deeper." These reports were published for the purpose of knocking down the shares, and they had the desired effect for a time. But look at the result! The 55 has proved the richest in the mine, both in quality and quantity, and a course of ore has been gone through in this level 50 fms. long, worth on the average 30*l*. per fm.; and the present end east is worth 70*l*. per fm., and the end west 20*l*. per fathom. The winze sinking below the 45, worth 30*l*. per fathom, is 9 fms. a head of the 55 east. In the 55 the lode when cut into was 7 ft. wide, the rich part being the south, and it took a fortnight to get through and value the whole. In the 65 only 3 feet has been cut into, and it may take another week to get through the lode, and that the south part has not been cut into is plainly evidenced by the fact that the water has not yet been let down from the levels above. Should the lode when cut through be *poor*, it may get rich in driving east and west, for there have been poor places in the levels above. The agent, writing under date Feb. 18, thinks there is *nothing to fear* respecting the future of the mine.

SATURDAY, FEB. 15.—The chief feature to-day is a decline in Prince of Wales of 5*s*. per share. Great South Tolgus, Great Vor, and Grenville are flatter; Prince of Wales, 64*s*. to 66*s*.; Chontales, 4½ to 4¾; Great Vor, 19 to 20; West Prince of Wales, 9*s*. to 11*s*.

MONDAY.—The market is very dull to-day. Chontales receded to 3½, sellers; Prince of Wales flat at 61*s*., sellers; West Frances firm at quotations; Chontales, 3¼ to 3½; Prince of Wales, 3 to 3¼; West Frances, 32½ to 37½; Carn Brea, 23½ to 24½; Chiverton Moor, 5¾ to 6; Clifford, 6 to 6¼; Great Vor, 19 to 20; Drake Walls, 12*s*. 6*d*. to 15*s*.; Great Laxey, 17½ to 18½; Marke Valley, 6¼ to 6½; South Grenville, 7*s*. to 7*s*.; Grenville, 28*s*. to 30*s*.; Mary Ann, 20 to 21; Seton, 84 to 86; West Chiverton, 67 to 68; West Prince of Wales, 9*s*. to 11*s*.; Chiverton, 2⅞ to 3⅛; South Frances, 21 to 23; East Caradon, 4¾ to 5; West Drake Walls, 12*s*. to 14*s*.

TUESDAY.—The market is still dull, being influenced generally by the fall in Chontales, owing to a fresh outbreak of cholera, and the dulness in Prince of Wales, caused by all sorts of rumours as to the lode in the 65, which cannot be cut through for several days. Chontales, 3¼ to 3⅜; Prince of Wales, 3 to 3⅛; West Frances, 34 to 36; Great Wheal Vor, 19 to 20; Drake Walls, 12*s*. 6*d*. to 15*s*.

WEDNESDAY.—Quite a panic in Chontales and Prince of Wales shares this morning: the former fell to 1¾ dls. sellers, and the latter to 55*s*. sellers. Chontales, 2½ to 2¾; Prince of Wales, 52*s*. 6*d*. to 55*s*.; Chiverton Moor, 5¾ to 6; Carn Brea, 23½ to 24½; Clifford, 5¾ to 6; Drake Walls, 12*s*. 6*d*. to 15*s*.; East Caradon, 4⅝ to 4¾; Great Wheal Vor, 19 to 20; Great Laxey, 17 to 18; Frontino, 15*s*. to 17*s*.; Marke Valley, 6⅜ to 6⅝; Tincroft, 13½ to 14½; West Chiverton, 66 to 68; West Frances, 32½ to 37½; Chiverton, 2¾ to 3; Grenville, 27*s*. to 29*s*.; Seton, 84 to 86; North Treskerby, 27*s*. to 29*s*.; South Frances, 22 to 24.

THURSDAY.—There is a better feeling in the market to-day, and Prince of Wales have advanced to 2¾, 3, and Chontales are firmer at 2½ to 2¾. West Chiverton, 66 to 68; Wheal Chiverton, 2¾ to 3; Grenville, 25*s*. to 27*s*. 6*d*.; Marke Valley, 6⅜ to 6⅝.

FRIDAY.—Market quiet, but Prince of Wales and Chontales firmer at quotations. North Roskears advanced to 7, buyers; Prince of Wales, 2¾ to 3; Chontales, 2¾ to 2⅞; Wheal Buller, 17 to 19; Great Wheal Vor, 19 to 20; Mary Ann, 20½ to 21½.

THE MINERALOGIST'S DIRECTORY.—A volume which cannot fail to prove of the greatest utility to mineralogists and members of field clubs, and one which will form a valuable supplement to works on mineralogy, geology, and allied sciences, has just been issued under the above title (through Mr. Stanford, of Charing-cross) by Mr. TOWNSHEND M. HALL, F.G.S. The author appears to have spared no labour to make the work complete, and has certainly succeeded in supplying a want which has long been extensively felt. The general arrangement of the work is excellent: the various mineral localities in the same county are grouped around their respective post towns generally, and in the strictly mineral districts, such as Cornwall, according to parishes. Mr. Hall gives first a list of the principal minerals with their chemical composition, and then a list of the mineral localities of England and Wales, Scotland and Ireland. The value of the latter list to the mineralogical tourist is obvious; should he find himself at Alderley Edge, in Cheshire, for example, he will learn that he may avail himself of the opportunity of furnishing his cabinet with specimens of New Red Sandstone and marls, anbolane, baryte, chessylite, galena, malachite, and towavite; or that if at St. Mewan, Cornwall, he may get cassiterite, gold, and silver; and so on for every other locality. By way of appendix, Mr. Hall gives the symbols of the elements with their atomic weights, the symbols used on geological maps for showing the contents of a vein or the position of the strata, and much other useful information, including a table of the succession of strata, with the minerals which are either peculiar to or characteristic of each respective formation; and there are two copious indexes. The book is undoubtedly entitled to a place in every geological library.

THE GOLD FIELDS OF NOVA SCOTIA.—A neat little volume, entitled "A Practical Guide for Tourists, Miners, Investors, and all persons interested in the Development of the Gold Fields of Nova Scotia," has just been issued (through Mr. John Lovell, of Montreal) by Mr. A HEATHERINGTON, the author of the Statistical Chart adopted by the Paris Exhibition Committee, representing the colony. It is a careful compilation, chiefly from official documents, and will, no doubt, be appreciated alike by the inhabitants of Novo Scotia and of the United States. The book is accompanied by a coloured section of the gold-bearing rocks of the Atlantic coast of Nova Scotia, and by a table giving the gold statistics for the several districts for the six years ending 1866; and the Nova Scotian revised statistics of mines and minerals will prove of great value, and of general utility.

ROYAL INSURANCE COMPANY.—A very handsome little almanac prospectus has just been issued by the Royal Insurance Company. It embraces, besides the ordinary calendar matter, a report of the company's annual meeting, tables of mortality, explanations of the advantages offered both in fire and life assurance, obituary notices of the Princess Matilda and of the late Emperor Maximillian, and a notice of the Queen's book—"Early Years of His Royal Highness the Prince Consort." The chromo-lithographic diagrams, showing the calculated and actual number of deaths in each year, the sums payable on deaths, and the numbers out of which one person will die in each year, will prove of general interest. The position of the company is now beyond question highly satisfactory.

SUBTERRANEAN CAVERNS, AND THEIR INHABITANTS.—Dr. E. H. Pardee, in a highly interesting communication to the *Scientific American*, remarks that the subject of subterranean currents is receiving much attention from American geologists, when connected with caverns; and a somewhat singular instance is record in Taylor's "Geology," when a well was sunk by an 8-in. auger to the depth of 200 ft. when a torrent of water came rushing to the surface, bringing with it small fish 3 and 4 in. long, while the nearest stream of surface water was from 10 to 12 miles from the well. Caverns become very interesting when we [illegible] hidden in their dark recesses skeletons and bones of large mammiferous animals, which have been hidden from the light of the sun, perhaps, for hundreds of years; and we go a step further in our examinations, and find the bones and skull of human beings, mixed with those of quadrupeds which have long ceased to exist. And as we advance from place to place with our investigations, and pass through the bone caverns of Germany where lay covered with clay large piles of bones and teeth of carniverous animals, we are naturally led to ask in what manner, and in what epoch, these bones of animals and skulls of human beings were deposited; and in our anxious desire for the answer our minds are often carried beyond the pale of mental jurisdiction, and reason ceases to be our guide.

Notices to Correspondents.

*** Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be *filed* on receipt: it then forms an accumulating useful work of reference.

EARLIER PUBLICATION OF THE MINING JOURNAL.—To meet the wishes of a large number of subscribers, arrangements have been made to publish two hours earlier than heretofore. By this improvement the *Mining Journal* can be delivered in Birmingham, Bradford (Yorkshire), Huddersfield, Leeds, Liverpool, Manchester, Salisbury, Southampton, and Wolverhampton by midday at latest, or from four to six hours earlier than previously. Subscribers in the metropolitan districts should likewise receive the Journal by the first morning delivery, and any complaint of their not doing so will be at once attended to.

EMERY.—Can any correspondent inform me whether the above metal is marketable, and at what price? also the second-class of the same? This substance shows by the magnet to be some degrees weaker, and this they say is a polishing substance, and will polish various implements, let them be ever so hard.—D. BROOM: *Dolgelly, Feb.* 17.

MANGANESE.—I want to know—1. What are its exact uses?—2. Where chiefly found?—3. In what state it is sent to market?—4. The present price per ton in England?—5. The extent of the demand, and any other information that can be obtained? If it be worth shipping to England it can be got here at little cost. If any of your readers can supply any such information I shall be greatly obliged.—J. W.: *Queensland, Australia.*

BORING BY MACHINERY.—Can you inform me if Mr. Doering's boring-machine can be applied to sinking shafts, as well as driving levels? Can you also tell me what is doing with General Haupt's machine? I saw it at the Paris Exhibition, and I understood that it was to be put to work here underground as soon as the Exhibition closed.—BORING MACHINE.

ST. JOHN DEL REY.—"An Anxious Shareholder," who suggests the desirability of convening a special meeting of the shareholders forthwith, should put himself in communication with the managing director of the company.

MINING IN SOUTH STAFFORDSHIRE.—For "1865," in line 51 in the article with this heading, in last week's Journal, read "1856; for "1866," in line 55, read "1856;" and for "fewer," in line 78, read "more."

SHARE DEALING.—We never interfere in the sale or purchase of shares; neither do we recommend any particular mine for investment or speculation, or brokes through whom business should be transacted. The addresses of most of the latter appear in our advertising columns.

*** We have a few volumes of the MINING JOURNAL for 1867, neatly bound, which can be had, price 30*s*., either direct from the office, or through any bookseller or news agent.

THE MINING JOURNAL.

Railway and Commercial Gazette.

LONDON, FEBRUARY 22, 1868.

COAL-CUTTING MACHINERY—No. II.

The vaticinations we indulged in some time since, with reference to the prizes offered by the Lancashire and Cheshire Coal Association for the best coal-cutting machines, we regret to say, have been fully verified. This, no doubt, is in a great measure due to the terms and conditions by which the successful exhibitors were to be bound. It will be recollected that the association offered three prizes, of 500*l*., 200*l*., and 100*l*., for the first, the second, and the third best machine worked by compressed air. Inventors taking any of the prizes had to agree to require no annual payment or tonnage royalty, as patent right, from any present or future member of the association; but that such member should pay a patent right on the purchase of each machine, which should in no case exceed 50 per cent. of the cost of the machine. Now, with such conditions as those, it is by no means surprising to find that on Nov. 1 last, the latest time fixed for the reception of machines intended for competition, there had not been a single entry. The time was still further extended, and at last three competitors have entered the lists—Mr. FIDLER, of Wigan; Mr. STURGEON, formerly of Leeds; and Messrs. FARRAR and BOOTH, of Barnsley. The machines of those gentlemen are recent inventions, and so far have not undergone that best of all tests—actual and continued working. With regard to coal-cutting machines generally, it may be said that during the last 12 or 14 years various patents were taken out, but all of them were still-born, having never found their way to work. Amongst the most successful and undoubtedly the best machines at present in use, and worked by compressed air, is that of Messrs. FIRTH, DONISTHORPE, and Co., of Leeds, and which we saw a few days ago. It is simple in construction, easily worked, and not liable to require frequent repairing. The machine is worked by picks, and so managed that the compressed air at the back, or return stroke, is not wasted. Recent improvements have made the invention nearly all that can be desired, there being no oscillation to speak of when the blow takes place, whilst the machine itself can be stopped with the greatest ease, or propelled forward as may be required. No stronger proof of the success which has attended the machine can be found than in the fact that it is constantly at work at the colliery at West Ardsley, near Leeds, and that many of them are to be found in use in the North of England and in Wales, giving the greatest satisfaction. With some additions being made, we were informed that the one machine at Ardsley would shortly be able to produce 1250 tons of coal per week—a statement which commends itself to the consideration of colliery proprietors in general. The machine of Mr. JONES, of Blaina, was for a time at work in the South Yorkshire district, but for some reason was not persevered with; it is on the pick principle. The only other machine at work in the county, we believe, is one by Messrs. CARRETT and MARSHALL, of the Sun Foundry, Leeds, and which appears to be rather more complicated than some others we have seen. It is worked by hydraulic pressure, and has made its way into various districts. One of the main features of the invention is the application of a strong steel bar, armed with three cutters or scoops, which are forced against the coal in such a manner as to undercut it by a sort of planing action. Instead of passing along the coal three times, as the ordinary pick machines do, in order to cut to the required depth, the full depth is cut at one operation. Two of the machines are constantly at work at the Kippax Colliery, near Leeds, two at Howard's West Hartley, and others near Aberdare, in Wales. Those who have them in operation speak very highly of them, and Mr. NAYSMITH, the engineer at Kenway's Colliery, Aberdare, states that, with 300 lbs. pressure, they had cut at the rate of 8 yards per hour. The cost of this machine complete, without any future charge, is only 200*l*. The firm have also completed a compact engine, capable of producing a continuous stream of water of 500 lbs. pressure, at a moderate cost.

Having so far noticed those machines which are in actual use, and which are now favourably known, we will return to those which have been entered for competition for the prizes offered by the Cheshire and Lancashire Coal Associations. In so doing we give the first place to Mr. JOHN STURGEON, who for some years past has devoted a good deal of time to the production of machinery for cutting and boring coal, stone, &c. In 1864, in conjunction with Messrs. WM. and SAMUEL FIRTH, of Birley, near Leeds, he was joint patentee of a machine for splitting coal and stone, and doing away with the use of gunpowder. This was proposed to be effected by driving a wedge or chisel into the coal by the power of a ram or other apparatus. In 1865 he was also joint patentee with Mr. CARRETT, of Leeds, and Mr. WARRINGTON, of Kippax, for a new and improved mode of actuating cuts or cutters used for getting coal, by a compound vibratory action embodying a twofold movement with every vibration of the pick or cutter, accomplishing by the one movement of the piston a double movement of the pick or cutter necessary to its efficient and uninterrupted action. Mr. CARRETT has recently paid the 50*l*. fee for the patent as holder of two-thirds of it, and how far the new patent will trench on it remains to be seen. Mr. STURGEON'S latest invention is self-acting, and can be adapted to any dip of the seam. The engine by which the machine is set in motion is worked by compressed air, and consists of a small cylinder about 7 in. in diameter, in which a piston works with a backward and forward motion. The machine itself only occupies a spase 3 ft. square, and weighs rather less than 8 cwts. The air is condensed outside the pit by an air-pump into a receiver, by which it is piped into the machine. By an ingenious contrivance care has been taken to prevent the striking of fire by the cutter when coming in contact with stone doing any damage or endangering safety even in the most fiery colliery. A pipe leading from the exhaust meets another pipe leading from a small water vessel attached to the machine, and as the mouths of the two pipes meet at right angles the exhaust air makes its escape over the orifice of the water-pipe, and causes to be drawn up a small quantity of water, which on mixing with the cool air current is dashed into spray. The water is forced on to the cutter and the groove it is making, and so keeps the cutter cool, reduces the temperature in the groove, and prevents the accumulation of gas and the igniting of splinters. The machine, from its novelty in some features, will be observed with more than ordinary attention, no doubt, by those interested in colliery operations and by the engineering body. Having seen the machine of Messrs. FARRAR and BOOTH at work, and having before alluded to it, we may in brief terms state that it is what is generally known as a "pick" one, and consists in the application of compressed air, for the purpose of working a slotting-tool or cutter upon the face of the coal. The to-and-fro motion of the reciprocating tool, or cutter, produces horizontal or longitudinal grooves, or narrow cuttings, to any desired extent, and at any desired level in the face, or end, of the coal, and thus facilitates its removal, or detachment, from the floor and roof of the mine. With regard to the invention of Mr. E. FIDLER, we are unable to speak with any degree of certainty, but we believe it consists of a number of rotary bars, which pierce the face of the coal by a longitudinal, or forward, motion.

Having gone so far through the machines which are to compete for the prizes, we must say it is to be regretted that the conditions offered were such as would not warrant the makers of those which are at present at work in various parts of the kingdom from entering against the former, which have never been tested and worked. Indeed, it is scarcely to to be expected that inventors who have spent thousands of pounds, and given years of unremitting attention to the subject, would give up their just claims to a fair compensation for having completed so truly a valuable piece of machinery, and which cannot fail by its more general adoption to have a very important influence in the working of our collieries. That machinery for getting coal will ultimately be more general throughout the country than appears likely at present we have very little doubt, and it is, therefore, to the interests of colliery proprietors to do all they can to promote invention in that direction, and not to seek an advantage at the cost of inventors. There is another point with regard to the competition, and which is well worthy of being kept in sight. It is that relating to the infringement of patents. Several of the machines have a great similarity to each other, so that in the event of any number of the successful ones being ordered, and actions for infringement are brought—which is more than likely—who are to defend them, the purchaser or the inventor? The question is one in every way suggestive, although it has not been noticed in the conditions of competition.

In taking leave of the subject for the present, we cannot but express our regret that the associated coalowners of Cheshire and Lancashire had not thrown the competition unreservedly open, as by such means there is little doubt the very best machine would have been found. The inventor could then make his own terms with the purchaser, as in the ordinary way of business. Hampering inventors by conditions to the advantage of the person making them has not been the means by which England has held its prestige for machinery against all other countries; and we trust that even yet we shall have an open competition, with a view to ascertaining which is the machine best adapted for coal-cutting purposes.

THE STEEL QUESTION.

The question of making steel in large quantities, by an economical process, out of comparatively poor ores, and thereby at a moderate cost, is now being practically discussed in real earnest. The subject is not confined to the laboratory or the ironworks, but it has found its way to "the place where merchants most do congregate." This week, at the weekly meetings on 'Change of the ironmasters in the Middlesborough, the Birmingham, and the Wolverhampton districts respectively, we learn that specimens of steel, cast and rolled, were exhibited, and their merits discussed. None of it was produced by the Bessemer process, nor had it been made after the older method of the crucible. The two processes to which the samples were due were, the first, JONES'S (samples shown by Messrs. FOX, HEAD, and Co., of the Newport Ironworks, Middlesborough); and that of GJERS'S process (samples shown by Messrs. LLOYD and Co., of the Linforth Ironworks, also at Middlesborough). This is the first time that specimens under the last-named patent have been exhibited. Messrs. FOX, HEAD, and Co. not only showed a piece of cast-steel that had been cut off while hot to try its hardness, but also steel plate of one-eighth of an inch thick, which had been run from the furnace into a bogie. Messrs. LLOYD and Co.'S samples were cast-steel. As was to have been expected, great interest was displayed in the castings alike at Middlesborough, Wolverhampton, and Birmingham. They were examined by men who were well up in the knowledge of what steel should be; and previously a steel made from the Cleveland iron, as all these had been, had been tested by a maker of steel of considerable mark in that part of the kingdom, and it had been pronounced equal to the very expensive metal produced by the costly Bessemer process.

Makers of steel, who have hitherto been dependent upon the crucible process, and who in that process have made large sums of money, are now beginning to look about them for a method by which metal can be obtained in larger quantities, in shorter time, and at less cost than by the old method. They are not prepared to take up the BESSEMER patent, because they believe in the possibility of making steel in a much less cumbrous fashion. They feel that the process they seek must not be dependent upon the best ores; but, above all, that they desire to avoid the re-heating. Steel must be made direct from the furnace in which the ore is smelted. Experiments are being made in Staffordshire and Cleveland with this view, and, perhaps in any other iron-producing district of the kingdom, and approaches to perfection are being made every week. We need not repeat the large number of processes out with this view, but every practical man will concur with Dr. PLATT, who, writing in 1686, and talking of the attempts at Wednesbury to build furnaces to make iron from the flame of coal, said that "experience is the great baffler of speculation."

Still, as the blast-furnace of the present day has become a success, notwithstanding that "Mr. BLEWSTONE, a high German," as Dr. PLATT called him, was unsuccessful in his furnace, "so ingeniously contrived that only the flame of the coal should come to the oare, with several other contrivances, that many were of opinion that he would succeed in it"—so the chemists and mechanicians of the present day who are turning their attention to the making of steel will soon be equally successful, and steel will be produced in larger quantities and at a cheaper cost out of the ores which are most in abundance in this country. The science of chemistry is now being applied to the production of iron and steel to an extent not hitherto dreamt of. Up to this time chemists have not had any experience in dealing with huge quantities, but such a laboratory as is now supplied at some of the great ironworks in the Cleveland and Ulverstone districts is enabling them to arrive at results of a much more practical character than those which they thought they had arrived at in their tiny experiments. No ironmaster who is moving with the times now dreams of making experiments without the assistance of the chemist, and chemists are now attached to all the great steelworks. The results already arrived at would seem to point to the conclusion that wherever ore is most abundant and fitted for making iron there, too, steel will be produced most economically and successfully. Mixtures will, however, still be necessary to turn out a reliable quality of steel, even as they are necessary to produce the most serviceable quality of iron.

At all works of great celebrity steel is now being made by the Bessemer process, which by reason of its irregularity has proved very disappointing, the failures having been much more numerous than those usual at any manufactory where steel has been made a longer time, though by no means on so large a scale, although the makers have used the same process—the Bessemer. We attribute the failure more to the absence of mixtures than to any other cause, because in the one instance one kind of material is in abundance, whereas in the other ingots have to be purchased, and it is immaterial where they come from. All this, however, shows that we are in reality at an experimental stage; nevertheless, the very important subject is taking

up with a will and a determination which must lead to success, and steel be produced in abundance, and at comparatively low prices. When this has b en done the coal question will not produce the anxiety to which in many quarters it has recently given rise.

TRADE GUILDS—INDUSTRIAL IMPROVEMENT AND TECHNICAL EDUCATION.

Mr. F. W. CAMPIN, barrister-at-law, at the last members' meeting of the Investors' Institute, read his paper "On Reviving the Action of the City Companies and Other Trade Guilds, with Reference to the Advancement of Industrial Improvement and Technical Education." Mr. CAMPIN commenced by alluding to the origin of Trade Guilds, which, notwithstanding any inference that might be drawn from the Saxon character of the word, he considered to be ascribable to the policy of the ancient Romans, as it was well known that at Rome there were various Trade Colleges, such as the College of Carpenters (Collegium Fabrorum Tignariorum), of Bakers (Pistorium), and so forth; and, according to Plutarch, the Roman people were divided into colleges, so early as the time of Numa. But though their origin might be Roman, it was evident that they were fostered, and fully developed, in this country, for some of them became so important as to rival the barons of feudal times. The Goldsmiths, Fishmongers, and Merchant Taylors of the City of London subsisting at the present day as influential bodies of associated citizens, although no longer exercising any considerable powers with regard to the trades that originated them, and whose names they bear. Also we have now in the Cutlers' Company of Sheffield an active corporation of high position in the social system.

Leaving the history of trade guilds with these passing allusions, Mr. CAMPIN proceeded to show the desirability of keeping up associations of men engaged in the same trade or vocation, as conducing not merely to their individual and collective benefit, but to the advancement of the branch of industry concerned; and he urged that there was at the present time great necessity for taking active measures to ensure to ourselves that position in the front rank amongst manufacturers which we have so many years enjoyed, seeing that our continental neighbours have within the last few years shown that they could come forward and compete with us in many branches of manufacture which have in former times been esteemed peculiarly our own. They now can send us locomotives, iron and steel manufactures, stationery, and other marketable goods. Mr. CAMPIN considered that trade guilds properly organised (and he particularly disclaimed any intention to advocate the revival of the exclusive rights and restrictive powers of ancient days) would do much for the advancement of industrial progress, and might be rendered very efficient machinery to deal with strikes, lock-outs, and for settling other disputes between masters and workmen.

Taking the City companies of London as an example, Mr. CAMPIN maintained that they might do much for Technical Education by supporting schools of practical science, and arranging that the elements of technical and scientific education be taught in any schools under their control, and by prizes to such students as may distinguish themselves in regard to technical education. They might help to advance industrial improvement by prizes for worthy works in their particular arts and trades respectively; also by requiring that all apprentices should pass an examination in practical science and technical education; and by taking care that masters should properly teach apprentices. Likewise they might organise meetings for the consideration of any inventions or improvements relative to their particular arts and trades. Mr. CAMPIN said that, like the guilds of old, the revived guilds should be composed of apprentices, journeymen, and masters, and it would be desirable that, like the present City companies, many of the members should be unconnected with the art or trade presided over by it, for then hope that trade bigotry, which often proves a barrier to improvement, might be nullified or prevented.

In the discussion on Mr. CAMPIN'S paper, Mr. VARLEY and several pastmasters and wardens of the City companies took part, notably, Mr. COBBETT, of the Painter's Company, who detailed the efforts of that company to promote the progress of the painter's art by exhibitions and prizes for meritorious works, by Mr. BLOXAM, of the Clothmaker's Company, and by Mr. JOHN JONES, of the Turner's Company. Mr. DEXTER, of the Working Men's Club and Institute Union stated that guilds such as Mr. CAMPIN proposed could not fail to prove beneficial to the trades and manufacturers of the country.

IMPROVEMENTS IN LOOMS.

Considerable excitement was created a few years since by the announcement that pickers, shuttle-straps, and picking-sticks were all to be dispensed with, and a system of throwing the shuttle by means of compressed air introduced in its stead. As the expense, waste of time, and annoyance resulting from the old arrangement is very considerable, an invention which promised to prove so important an improvement was, of course, most favourably received by manufacturers, but it was found that, although the invention contained all the elements of success, it required some additional modification to render it practicably available. The working of the pneumatic driver was probably all that could be desired, but the cost of adopting the invention, owing to the necessity of providing air reservoirs and a complicated series of pipes, to keep the several looms supplied, prevented its general application. The great novelty in the loom introduced three years ago consisted in applying the compressed air directly to the shuttle. That this was the principle which would ultimately prove to be that capable of practical adoption was generally felt by all connected with weaving, but all were equally convinced that the introduction of air-drivers must be accompanied by diminished first cost, and not by an increased outlay either upon the loom itself or for the laying on of the air—for it should be mentioned that, as the air reservoirs were necessarily excluded from the room in which the looms were at work, the air had to be conveyed in pipes, precisely in the same manner as gas is now conveyed from the gasworks to the consumer.

To secure the advantages which the pneumatic driver promised, without the inconveniences which effectually prevented its general adoption, Mr. CHARLES RICHARDSON, of Gracechurch-street, has devised an extremely simple and ingenious arrangement, which has the important recommendation that it can be applied to any existing loom at a trifling cost. The shuttle-box on each side of the loom is in connection with a cylindrical case, a connecting-rod running through the bar, so that when one case is open the other must be closed. The closing of the case permits the compressed air to escape upon the back of the shuttle, and has all the effect of the old picker-stick. There is a simple spring arrangement to each shuttle-box, for catching the shuttle when it comes over, and preventing its rebound; but this spring is pulled off before the compressed air is let out of the case. The closing of the case is effected by a common bell-crank lever, worked by a small grooved roller, carried by a lever, connected by a wheel and pinion with the second motion pulley, and to the bell-crank lever there is also attached a wedge, for taking the spring off the shuttle. It is probable that in practice this bell-crank lever will be worked direct from a cam on the pulley-shaft, for the remainder are simply unnecessary additions to the cost of the attachment.

But the great secret of the success of Mr. RICHARDSON is not the working of the bell-crank lever, but the slide valve from which he admits the air from the case to the shuttle-box. The rod, which has already been mentioned as passing through the bar, carries a hollow piston valve, at the case end of which is a circular valve, to admit air to the case on the back stroke. As soon as the forward stroke commences, the compression of the air closes this valve, and the compression continues until the end of the piston valve reaches the port, which being circular permits the sudden escape of the compressed air to the shuttle-box, driving forward the shuttle most efficiently. By the time the shuttle has crossed the race the other case has become filled with air, or nearly so; any remaining portion of the stroke being utilised in helping the shuttle into the box. The loom works very smoothly, and as the bar end could readily be made to rotate, or partially so, the invention would seem to offer especial facilities when several shuttles carrying different colours are used. A single loom in a mill can be altered to the pneumatic principle, as applied by Mr. RICHARDSON, so that every manufacturer can avail himself of the opportunity of testing it at a very small outlay. The arrangement is at once simple, efficient, and not liable to get out of order, so that it may reasonably be expected that it will be extensively introduced.

Manufacturers can inspect a loom working on Mr. RICHARDSON'S principle at his place of business, 75, Gracechurch-street, City; and some looms will shortly be finished at Messrs. SPIERS and SON'S, East-road Silk Mills, where, it is believed, they will be thrown open for public inspection.

FOREIGN MINING AND METALLURGY.

The state of French siderurgical industry has presented little or no improvement; orders continue scarce, so scarce, in fact, that notwithstanding important reductions which have been made in the production, work is wanted at some establishments. The Cons-la-Grand-ville blast-furnaces have resumed operations since a decree has been signed granting the Pulventeux concession to the Marquis de Lambertye. This concession is very advantageously situated near the Longwy station. Meetings are announced as follows: Sirault Colliery Company, Feb. 25, at Paris; Denain and Anzin Blast-Furnaces and Forges Company, Feb. 28, at Paris: Bank of Mines, Feb. 29, at Paris; Sougland and Fourmies Forges and Foundries Company, Feb. 29, at Paris; Haute-Loire Metallic Mines Company, Feb. 29, at Yssingeaux; Rulhe Collieries Company, March 2, at Paris; and the Kef-Oum-Theboul Mines Company, March 5, at Marseilles.

It is stated that the Cockerill Company has received an important order for locomotives for Italy. Negociations are also pending for an important order for rails for Russia. The general aspect of affairs in the Belgian iron trade remains much the same; the hope of an early revival in affairs appears, however, to have become more general. It is expected that the use of iron sleepers, instead of wooden ones, will supply a new element of employment for the siderurgical works. The substitution of iron for wood is especially useful in the southern countries of Europe, in which wooden sleepers resist, but for a comparatively short time, the trying climatic influences to which they are exposed. A Charlerol establishment is now making iron sleepers for an Egyptian railway, on which it has been found that the duration of the wooden sleepers used has been only three years. The Belgian coal trade exhibits some depression; although the extraction has been generally reduced, there are, nevertheless, important stocks on hand. Some reductions have been made in wages. In the Charlerol basin some attention has been directed to reductions made in the rates charged for the conveyance of Anzin coal to Rheims—reductions which are said to render the sale of Charlerol coal impossible at Rheims. It seems clear that the coalowners of the Charlerol district will have to come to some understanding on the subject with the Eastern of France and Great Central Belgian Railway Companies. For some time past there have been rumours of an intended fusion of the Centre of Gilly, Masse Saint-François, Ham-Sur-Sambre, and Appaumée-Ransart Colliery Companies, including the concession of the Bois de Fleurus and Fontenelle, purchased by the last-named colliery some years since. We learn that this important fusion has been realised during the last few days, the amalgamated undertakings taking the name of the United Collieries of the Basin of Charlerol. The office of the new company will be at Charlerol, and M. Desiré Clerx becomes the director-general. The new company will have 12 pits in activity in a few years, so that it promises to become a power on the home and foreign coal markets. The concern intends, it appears, to establish at Couillet a manufactory of briquettes of coal, in order to turn to account the small coal, of which considerable stocks accumulate in almost all the workings. In the Liége basin good qualities of coal experience a tolerably well-sustained outlet, and prices are relatively well maintained, but inferior qualities are completely neglected, and they are offered abroad on terms which assure them a preference over Prussian coal. It should be added that these sales are almost always effected at a loss. In the basin of the Couchant de Mons deliveries have experienced a certain check. The extraction is much reduced, and although a fall has taken place in wages, miners are working upon an average only four days per week. The Sars-Longchamps and Bouvy Collieries Company will pay a dividend for 1867, May 1. Meetings are announced as follows:—Quaregnon Colliery Company, Feb. 25, at Quaregnon; United Collieries Company, Feb. 28, at Quaregnon; Bonne Fin Colliery, March 2, at Liége; Company of Capitalists United with a Mutually Industrial Object, March 9, at Brussels; Thy-le-Château Blast Furnaces and Forges Company, March 14, at Charlerol; Rhein, Main, and Lahn Mines and Ironworks Company, March 31, at Darmstadt; and Sars-Longchamps and Bouvy Collieries Company, April 30, at St. Vaast.

In referring last week to foreign railway prospects, we stated that a Prussian railway loan had been successful. This statement was premature. The loan in question was contracted by the Prussian Government for general purposes, and was more than fully covered. The Prussian railway loan has not yet been carried through, but as it is a State affair—that is, as it is guaranteed by the Prussian Government—there appears little or no doubt as to its success, and it will, of course, have an important influence upon the construction of railways in Prussia, as we hinted last week.

The Havre and most of the German copper markets have presented a better tone of late. Drontheim has made 50 fls. to 52 fls. at Rotterdam, whilst at Amsterdam Drontheim and Swedish have made 50 fls., and English 45 fls. At Havre Chilian in bars has realised 70*l.* 10s. to 71*l.*; Peruvian minerals (pure standard), 73*l.*; United States (Baltimore), 80*l.* to 82*l.*; Lake Superior, 80*l.* to 97*l.*; Mexican and Plata, in bars, 68*l.*; old red copper, 68*l.* to 69*l.*; bronze, 66*l.* to 68*l.* per ton. At Marseilles, Toka for consumption has brought 74*l.*; Spanish, 72*l.*; refined Chilian and Peruvian, 80*l.*; old red copper, 64*l.*; Levant ditto, 64*l.*; rolled red copper for sheathing, 84*l.*; yellow ditto, 74*l.* per ton. At Paris, Chilian has realised 70*l.* 10s. to 71*l.*; and Corocoro mineral, 73*l.* per ton. With regard to tin, the reports received from Amsterdam and Rotterdam indicate an active demand, and by consequence numerous sales. The article has thus been brought to a quotation of 53 fls. to 53¼ fls. for Banca, and 52 fls. for Billiton. The same firmness has been generally remarked on the secondary markets. At Paris, Banca has made 94*l.*, Straits 92*l.*, and English 92*l.* per ton. At Havre, Banca has made 88*l.* to 90*l.*; Straits, 86*l.* to 88*l.*; and Peruvian, 82*l.* to 84*l.* per ton. At Marseilles, Toka for consumption has brought 74*l.*; Spanish, 72*l.*; refined Chilian and Peruvian, 80*l.*; old red copper, 64*l.*; Levant ditto, 64*l.*; rolled red copper for sheathing, 84*l.*; yellow ditto, 74*l.* per ton. At Paris, Chilian has realised 70*l.* 10s. to 71*l.*; and Corocoro mineral, 73*l.* per ton. With regard to tin, the reports received from Amsterdam and Rotterdam indicate an active demand, and by consequence numerous sales. The article has thus been brought to a quotation of 53 fls. to 53¼ fls. for Banca, and 52 fls. for Billiton. The same firmness has been generally remarked on the secondary markets. At Paris, Banca has made 94*l.*, Straits 92*l.*, and English 92*l.* per ton. At Havre, Banca has made 88*l.* to 90*l.*; Straits, 86*l.* to 88*l.*; and Peruvian, 82*l.* to 84*l.* per ton. At Marseilles, Banca has been quoted at 96*l.* per ton. Lead has participated in the general improvement in prices, but to a less extent; a serious advance in this metal will not be possible unless transactions regain more activity, and hitherto the demand scarcely extends beyond the current requirements of consumption. At Rotterdam, Stolberg has made 11⅛ fls. to 11¼ fls., and German 11¼ fls. At Paris, Spanish saumons have brought 19*l.* 4s.; French, 19*l.* 8s.; English, 19*l.* 8s.; and German, 19*l.* 8s. per ton. At Havre, Spanish has made 19*l.* 4s. per ton, and lead from other sources has realised the same rates. At Marseilles, lead in saumons, first fusion, has made 18*l.* 6s.; ditto, second fusion, 18*l.* per ton. Lead in shot has been quoted at 19*l.* 10s., and rolled and in pipes 21*l.* per ton. There has been no very material change in the tone of the zinc markets; the symptoms are, nevertheless, satisfactory, and a hope of a revival in affairs continues to prevail in the producing centres. Breslau and Hamburg have displayed a good tendency, notwithstanding the moderate extent of the transactions effected. At Paris rough Silesian has made 20*l.* 18s.; sinc from other source, 20*l.* 4s.; and rolled zinc of the Vieille Montagne Company, 26*l.* per ton. At Havre zinc has realized 21*l.* 12s. to 22*l.* per ton.

THE INLAND REVENUE.—The increase in the assessment for income tax of ironworks in the United Kingdom in 1865-6, as compared with 1864-5, was 94,000*l.*; in the assessment of mines, 230,000*l.*; and in the assessment of railways, 1,742,000*l.* The nett increase in the Scotch assessments amounted to 270,000*l.*; this, for the most part, resulted from assessments on houses, which yielded an increase of 150,000*l.*, and railways 179,000*l.*, while the assessments on ironworks showed a decrease of 52,000*l.* The amount of taxation levied upon railway traffic by the Commissioners of Inland Revenue has greatly increased of late years, having been 348,611*l.* in 1857-8, 339,569*l.* in 1858-9, 359,212*l.* in 1859-60, 366,281*l.* in 1860-1, 372,178*l.* in 1861-2, 383,057*l.* in 1862-3, 403,626*l.* in 1863-4, 439,332*l.* in 1864-5, 463,023*l.* in 1865-6, and 471,632*l.* in 1866-7. This taxation is limited to England, Wales, and Scotland, and England and Wales contributed the lion's share of it—320,091*l.* in 1857-8, 310,854*l.* in 1858-9, 329,744*l.* in 1859-60, 337,079*l.* in 1860-1, 342,145*l.* in 1861-2, 353,159*l.* in 1862-3, 371,441*l.* in 1863-4, 405,357*l.* in 1864-5, 427,925*l.* in 1865-6, and 436,608*l.* in 1866 and in 1867.

COAL IN SHROPSHIRE.—At the Severn Valley Field Club annual meeting, held at Coalbrookdale, last week (Mr. H. Dickinson in the chair), the Rev. A. T. Bonner, Her Majesty's Inspector of Schools, read a paper "On Field Clubs, their Use and Abuse." Mr. D. Jones said, speaking from his own experience, as one employed by Government in ascertaining the amount of available coal in the county, he had found a great laxity in mining, particularly in the Forest of Wyre and the Brown Clee Hills, and an absence of proper sections, and he thought the club would be doing a valuable service by keeping a record of their proceedings. There would come a time when the present coal field would become exhausted, and it might be of immense service to others of future generations to be able to refer to a record of the investigations and proceedings of such a society. Mr. Randall said there were also questions of great importance, too, touching the extent of the present coal field, and its relation to that of South Staffordshire, on which a visit of the members might serve to throw some light. A good deal of misconception existed; very erroneous statements had been made in relation to this subject and to the recent sinkings for coal in the Lilleshall field, and if two or three members were deputed to investigate the subject, and to bring the result of their investigation before the club, good might result, both to the members and the country at large.

COAL IN RUSSIA.—With regard to the coal deposits existing in the mountains of Kradnovodsk and Balkan, the estimates of the probable profits realisable are most encouraging. The Caspian flotilla and the Caucasus and Mercury Company's steam vessels, require about a million poods (or more than 16,000 English tons) of coal annually. If the wood fuel used by the Volga steamers were replaced by the coal, they would require a yearly supply of 15,000,000 poods. If instead of paying 30 copecks per pood for anthracite, the owners of steamers could obtain coal at 20 copecks per pood, the use of wood would be discontinued, under these circumstances an annual supply of 7,000,000 poods of coal would be required; but in order that it should not exceed the above-named price, it must be placed for sale on the shores of Krasnovodsk Bay at a rate not higher than 10 copecks per pood (*i.e.*, 3 copecks) for the cost of transport from the pits to Astracan, and from Astracan to the wharves on the Volga up to Kazan on an average at 7 copecks per pood. The value of the coal on the spot—that is, the cost working the pits and conveying the coal to the shore—cannot be more than 5 copecks; the remaining 5 copecks per pood represent, therefore, a clear profit, which, in the proportion of the demand on the Caspian, will return 50,000 roubles on a capital of that amount, or 100 per cent.

REPORT FROM NORTHUMBERLAND AND DURHAM.

FEB. 20.—The Coal and Coke Trades continue, on the whole, dull, and at many of the collieries short time is worked, not only by the underground men, but by the mechanics also, and in some cases many hands have been paid off—indeed, it is feared this process may go on some time unless arrested by the revival of trade. At some of the large works on the Tyne affairs look much brighter; at Hawks's Works, Gateshead, orders of an extensive kind have been received for railway bridges for Russia, piers, &c., for India, and other work. At Abbot's Works the strike of millmen and puddlers has been adjusted, and work is gradually coming in there also. At the extensive iron, shipbuilding, &c., works, at Jarrow, there is unmistakable signs of improvement. The rolling-mills there are, indeed, pretty well supplied with work, and the shipbuilding department is gradually getting brisk. The prospects, on the whole, for trade is certainly improving, and the coal and coke trades may, therefore, be expected to improve also shortly. Some of the yearly bindings, alluded to last week, are fixed for Saturday next, but they will not be at all general until a month hence; as yet there appears to be no excitement whatever respecting them, and it is not at all likely that any changes of consequence will take place at this time.

At Middlesborough, on Tuesday, the prices of pig-iron were firm, but no great business was done in this description of iron. The enquiries for plates, angles, bars, &c., were more numerous, and the demand for ship iron, &c., is gradually increasing. Large orders for rails have been received from various quarters, and, on the whole, the tone of the market was decidedly cheerful. There were also many enquiries for foundry iron. At the close the prices were—No. 1, 47s.; No. 3, 43s. 6d.; No. 4, 42s. 6d. The new steel manufacture continues to excite much interest. Specimens of this steel were exhibited by Fox, Head, and Co., and the following explanation was given as to its production:—"Ingot obtained from steel furnace, Feb. 7; one end has been cut off hot, to try the hardness. No crucibles or pots used in the process." This specimen was, of course, subjected to very close examination, and the grain was considered rough. It was, however, stated that this specimen was greatly superior in quality to the steel first made by Bessemer in his earliest efforts. A spike forged from a runner from the same casting as the large ingot was also exhibited. A cast-steel plate was also shown, ½ in. in thickness and 3 or 4 ft. in length, and in its rough state it could be bent double without breaking. Fox, Head, and Co. are, it appears, very sanguine as to the success of the new patent, and they are now laying out plans for steel works at Newport, on a large scale. Mr. Samuelson has also determined to erect works near his furnaces at Newport, for the manufacture of steel by Martin's process. Some specimens of steel were also shown, made by Mr. Gjers, manager at Messrs. Lloyd's Linthorpe Ironworks, and were described as having been melted entirely from Linthorpe pigs, and drawn out at the works. Those specimens were only small, but they were very fine in the grain.

REPORT FROM SCOTLAND.

FEB. 19.—Our Pig-Iron Market has been very steady all the week, with a restricted business, and, if anything, prices are better for buyers. The French and Canadian spring demand is much under the average, the advices from the latter showing that the autumn shipments had not yet been disposed of. Our own home demand is also lessened by the lock-out of the ironmoulders. The shipments from all the Scotch ports for the week just ended is 8650 tons, against 12,335 tons, fully ⅜ths of the former total being shipped foreign. This makes the total decrease on the year amount to the large sum of 12,200 tons. Owing to a strike amongst the fillers at the Calder Ironworks, five of the seven furnaces there have had to be blown-out, the remaining two being served by labourers, who have accepted the terms refused by the fillers, and which will reduce the make by the product of five furnaces. On Monday a fair business was done, at from 52s. 6d. to 52s. 4½d.; yesterday, 52s. 4½d. and 52s. 4d. cash was accepted for several lots, and to-day about 5000 tons were done at 52s. 3d., in a flat market, closing sellers; buyers, 52s. 1½d. Makers' iron—Coltness, 58s.; Gartsherrie, 57s. 6d.; Calder and Glengarnock, 55s. 6d.; Summerlee, 55s.; Eglinton, 53s.; No. 1, g.m.b., 52s. 3d.; No. 3, 51s. In Manufactured Iron there is not the trade passing through the hands of makers that used to be, especially for shipment, and there is again a perceptible lull in the home demand, with the exception of ship-iron, which is in active request by the few firms who can produce it; but the tendency to higher prices in this class of iron has been assisted by the depression affecting the bar trade, and list prices are being adhered to as last quoted. The ironmoulders' strike still continues, and no correspondence has yet taken place between employer and employed that would lead us to suppose that this unhappy dispute will be brought to a speedy termination. However, from America the following important document has been received, which may be of use to more than our Scotch ironmoulders, and, for the benefit of the readers of the *Mining Journal* generally, we give it *in extenso*:—

TO THE OFFICERS AND MEMBERS OF THE SCOTTISH IRONMOULDERS' SOCIETY.

We, the undersigned, members of the Scottish Ironmoulders' Society, came to America expecting to find plenty of work at our trade. We have been here over 10 weeks, and, although we have made every effort to obtain employment, we have not yet found an hour's work, and there is no prospect that we will. We have tried to get work at common labouring work, but all branches of labour are alike dull.

We deem it our duty to make these facts known to our brothers at home, that others may not be deceived as we have been. We called upon Mr. W. H. Sylvis, the President of the Moulders' Society of America, and he told us that he had written several letters to Mr. Guile, Secretary of the English Society, acquainting him of the state of trade here, and that one of his letters, together with a protest, signed by 12 members of the English Society, against any more of our members coming here, was published in the 157th monthly report of the English Society. He was surprised to find that we in Scotland had no information of the sad condition of trade here. He severely censures the officers of both the Scottish and English Societies for withholding information relating to trade here. He says he has sent reports regularly to both these societies, and has frequently written to Mr. Colin Steel, who never took any notice of his letters; and thus our members have been continually kept in the dark in reference to the state of trade in the United States.

We have furnished the President of the American Society with the names of several members at home, so that they may receive accurate information from him as to the state of trade here; and we ask each of them to make it known to all our brothers, as any information sent from here to offices-bearers is withheld from the members. All kind of work is equally scarce, and we see nothing before us but starvation; and hundreds of our fellow-members who have come here as we did are in a like, or even worse, condition.

THOS. HUNTER, B, 205.
JAS. GOUDIE, G, 32.
JAS. SNEDDING, A, 1601.

Philadelphia, Jan. 22, 1868,

I do hereby certify that the above statement was voluntarily handed to me by the men whose names are signed to it, and that the statements therein made are true. For the information of all, I will state that we have not had so universal a prostration of trade in this country for 30 years. Fully three-fourths of the entire labouring population of the States are now out of work, and there seems to be no prospects for better. Out of a membership of over 9000 more than 6000 of our members are out of work, and we have had heavy strikes on hand for the greater part of the past two years. Men coming here without means to support themselves must either starve or go to the poor house. I denounce your present emigration scheme, and everything connected with it, as a direct and outrageous fraud practised upon your own members, and a gross imposition upon us.

WM. H. SYLVIS, President of I.M.I.U.

Office, 330 Harmony-street, Philadelphia, U.S.

The Coal Trade is still without much life, but happily there has been no further reduction in price. Indeed, it is impossible for prices to recede further, as some of our best coals are being sold at under the cost of lordship and working. At the pit's mouth some classes of coals can positively be purchased for 4s. per ton, and even less money; and still our colliers are playing the martyr in the public eye, because they are not receiving 5s. per day for their eight hours' work. In the presence of facts like these the present ferment among the colliers, at the instigation of well-paid Union officials, must appear to the public as the height of folly. To show, however, that these officials can effect their purpose in almost any times, Mr. Alexander McDonald, their secretary, at a miners' festival, held at Hamilton last week, was presented with "a purse of sovereigns, in the name of the miners of the district." Mr. McDonald is certainly an "ill-paid" man. He was presented with a purse of sovereigns before commencing his American tour, and for presenting the poor colliers here with his log of how the wind blew and how he was lionised on the journey out and home again, he was presented with another purse of sovereigns on his return home.

From our advertising columns it will be seen that, besides the sale of valuable colliery plant at Overton and Comrie Collieries, on Tuesday next—the plant at one of the pits was only four months in use

—there is to be a sale of 4000 tons of famous Overton Cannel coal, which is reported to yield upwards of 13,000 cubic feet of gas to the ton of coal. It sold at 30s. per ton readily, and what it may bring by auction is for those interested to determine. Those to whom the plant may be useful may fall in with a rare bargain.

The paper "On Certain Points in the Manufacture of Malleable Iron, with Special Reference to the Richardson Process," by St. John Vincent Day, C.E., read before the Institution of Engineers in Scotland, on Jan. 15, is published in the just issued "Transactions" of the society. In the course of the discussion upon the paper, Mr. Day stated that out of common pig-iron puddled iron was now made by the new process equally as strong as with that hitherto made from the best brands, by the common method of puddling from the best pigs. Chemically speaking, the new iron is considerably purer than that made from the best pigs by the old process. The economy thus brought about was, therefore, unquestionable. The discussion generally was not very favourable to the process, but this is explained by the observation of Mr. Day, that, on account of the process being so recent, it had not been possible to collect together all the information desirable; and it must be remembered that, by reason of the fact of the theory referring to the metallurgy of iron and steel being yet imperfect, it was difficult to produce an exhaustive explanation of such a subject at this early stage. No question, however, could remain as to the value of the great facts which had already been elicited.—[Letters from Mr. Day, descriptive of the Richardson process, with analyses, appeared in the *Mining Journal* of August 10 and November 9 last.]

Veins of hematite iron, supposed somewhat extensive in character, have just been discovered at the foot of the Garleton Hill, in East-Lothian.

We are glad to learn that the firm of Macnab and Company, shipbuilders and ironfounders, in Greenock, who suspended payment last week, have offered 12s. in the £ on liabilities estimated at 27,000*l*. Arrangements have been made for temporarily carrying on the business, and we trust before long an arrangement may be effected with all the creditors of the concern.

A very fine modelled iron sailing ship has been launched from the building-yard of McMillan and Son, Dumbarton, for the East India trade. She was named the Peter Stuart, after one of her owners—Stuart and Douglas, Liverpool—and is 225 feet long, 39 feet broad, and 23 feet deep.

The new bridge over the Forth, which, when completed, will be a monument of engineering skill, is likely to become a success, the local subscriptions having now reached 35,000*l*., and additional shares are to be taken up.

REPORT FROM DERBYSHIRE AND YORKSHIRE.

FEB. 20.—As was expected, the depression which has so long prevailed in the Iron and Coal Trades of North Derbyshire has led to notices being given at the principal works of a reduction of wages. Following in the wake of the Butterley Colliery, the men at Sheepbridge, Wellington, Staveley, and other places, have been served with the usual intimation that a reduction equal to about 10 per cent. will take place. No opposition is anticipated to what appears an inevitable necessity under existing circumstances, more especially as the district has been about the last to adopt a course which has now become general throughout the country. The iron trade generally is quiet, and there is by no means that activity in the business doing in coal which is usual at this early period of the year. The tonnage being forwarded to London is by no means large, although the Clay Cross collieries continue to maintain their position as the largest producers for the metropolis. A moderate quantity of gas coal is being sent from the district by the Midland Railway, there being some good contracts held by several of the large firms. In South Derbyshire matters have been somewhat quieter, and the men are gradually realising the fact that the cause of the Union has signally failed, and as a result that they have driven the trade out of the district, and will themselves have to follow. Most of the collieries are now full handed, but some considerable time will elapse before the trade, so easily lost, can be recovered. It may be said that previous to the Union movement no body of colliers in the kingdom were so comfortable and well off, and many of them were in possession of their own freeholds; but now all is changed, and poverty and misery has supplanted plenty, comfort, and respectability.

There is no perceptible improvement in the principal branches of the Sheffield trades. In the heavy steel trade there is rather more doing, but nothing worthy of particular notice. The question of Trades' Unions, for want of a better, is just now occupying a good deal of the attention of the working man; and, as might be expected, Mr. Roebuck, whose recent denunciations are still fresh in the mind of the public, has come in for a large share of abuse. The Unionists have also agreed to oppose the return of any person as a member for the borough who will not pledge himself to support a measure having for its object the legalising of Trades Unions. Of course, this is intended for Mr. Roebuck, but the threat is one that that gentleman need not fear. On the other hand, Mr. Long, the able and talented editor of the *Sheffield Daily Telegraph*, to whom, in a great measure, is due the thrilling exposures brought to light by the late Committee, is about to be presented with a substantial testimonial, the subscribers to which include the principal nobility, statesmen, and gentry in the kingdom, of all shades of politics.

The ironworks at Rotherham, and in the South Yorkshire district, are far from active, and so far the puddlers at Milton and Elsecar have not resumed work. In nearly all branches of the trade there is little doing, nor can the prospects be said to be at all encouraging. The demand for coal is also quiet, and, notwithstanding the fact that colliery owners have made a reduction in prices, still orders come in but slowly, and short time for the workmen is fast becoming the rule. To London and the southern depôts the demand has fallen off, and so much have prices been lowered in the North that some of the largest dealers, such as Wedd, Harris, and Co., who have an immense connection, find it to their advantage to send their wagons to be filled in the Newcastle district in preference to South Yorkshire, although the difference in the carriage rate must be considerable. In steam coal there is not much doing, the demand for the ports of Hull and Grimsby being anything but good. As a result, stacking has had to be resorted to. For the Lancashire market there is only a moderate business being done, although colliery proprietors, as a rule, have considerably reduced their prices for engine fuel and common coal. In coke there is a fair trade, owing to most of the furnaces being in blast. The patent ovens at Silkstone, belonging to the Frodingham Company, are kept fully going, the requirements of the firm for their own furnaces being about 600 tons per week.

At East Ardsley, between Wakefield and Leeds, Messrs. Firth and Co. have nearly completed two blast-furnaces. Unlike those usually made, they are not only very substantial, but highly ornamental, and in every way attractive. It is expected they will be in blast some time next month. The one, it is said, will be from Lincolnshire, and no doubt the advantage of bringing the stone to the coal, instead of *vice versa*, will be found advantageous in a pecuniary point of view.

A selected armour-plate from a number made at the rolling mills of Sir J. Brown and Company (Limited), Sheffield, for the turret-ship Monarch, now building at Chatham, as been tested on board the Thunderer target-ship at Portsmouth, under the superintendence of Capt. A. Hood, C.B., commanding the gunnery establishment of Her Majesty's ship Excellent. The plate weighed 6 tons, was 12 ft. in length by 3 ft. 6 in. in breadth, and 8 in. in thickness. Nine shots were fired at the plate, all striking in a space measuring 35 in. by 18 in., and seven of the shots in a central space 18 in. square. The plate proved to be of unusual excellence, and will receive a high classification. Messrs. J. Ellis and J. C. Bayley were present, as representing the firm of Sir J. Brown and Company.

REPORT FROM MONMOUTH AND SOUTH WALES.

FEB. 20.—The reports received from the various ironworks during the past week possess no feature of interest, the same absence of demand which has been reported week after week for some time still prevailing, and, as a natural consequence, a great amount of distress, combined with anxiety as to the future, is being endured by a large portion of the hands employed. The few orders received continue on the books only for a short time, as they are only for small quantities, and are speedily got out of hand. How long the present unsatisfactory state of things will last it is impossible to say, but it is generally believed that matters will assume a more satisfactory state after the principal railway meetings have been held, as it is well known that the home railway companies are in want of considerable quantities of rails and other material, and that the directors are only waiting for funds to enable them to enter the market, as they are well aware that purchases can be more advantageously made at the present time, when such depression prevails, than when the trade will have assumed something like its former vitality. The commencement of the Russian season is anxiously looked forward to, as several large orders are expected from the Muscovite empire, which will afford employment to a large number of hands. From the United States the demand for rails has slightly increased, and there are several large vessels at the local ports taking in cargoes for the American markets. The advices lately received from that country are considered favourable as to future requirements, and should no political contentions arise to interfere with commercial enterprise, the next few months will witness a considerable increase in the shipments to the States. From the Continent enquiries are limited, and the purchases exceedingly small, but the success of the various continental railway loans is looked upon as an indication that eventually some heavy contracts will be forthcoming from that quarter, and as there is every prospect of peace continuing, some makers believe that the improvement will set in at an earlier date than many anticipate. There is a better demand for pig-iron, and a more cheerful tone prevails than for some weeks past. Tin-plates command a better sale, and prices are firmer.

Although steam coal proprietors have some orders on their books, the shipments since last report have been considerably below the average, and a greater degree of quietness evinced than usual. This has undoubtedly been brought about by the refusal of the colliers to submit to the reduction in wages, and the consequence was that several of the leading collieries were at a standstill for days. The colliers, however, have since shown a disposition to give way, and in the Aberdare Valley the whole of the men have gone in on the masters' terms; and although there are some of the hands who refuse to submit, the strike in Glamorganshire may be said to be virtually at an end. In Monmouthshire the wages question has not been so satisfactorily settled. All the house colliers who received notice of a reduction are now on strike, but it is believed it will not be of long duration. A meeting was held last week at Varteg Hill, when hundreds of colliers, from Blackwood, Abertillery, and the eastern valleys, were urgently requested by Mr. Handel Cossham, Mr. C. Herbert, Mr. J. T. Edmonds, and other colliery proprietors, to return to their work on the masters' terms, but no arrangement could then be come to. On Monday, however, some of the men employed at the Varteg and Varteg Hill Collieries returned to their work, but on the following day a large number of colliers from Blackwood and other places proceeded to where the men were employed, and owing to their violent threats and acts of intimidation the Varteg colliers were induced to again turn out, and are now on strike. At Tillery and Abercarne several acts of violence have been committed, and the police have been further strengthened from other parts of the county.

The directors of the Monmouthshire Railway and Canal Company have appointed Mr. Henry Appleby (district locomotive superintendent on the Manchester, Sheffield, and Lincolnshire Railway) locomotive superintendent on their railway. Mr. Appleby was formerly connected with the West Cornwall, and his early training was under Sir D. Gooch, Bart., at Swindon. There were seven applicants for the vacancy.

The almost fabulous wealth of the Crawshay family has already been noticed in the *Mining Journal*, and it may be interesting to a great many of its readers to learn how small beginings may terminate in the annual income of the sovereign of Great Britain. In the last century the original Crawshay, then a farmer's son, rode to London on his pony (his sole property) to seek his fortune. He began by sweeping out the warehouse of an ironmonger, who was of a discriminating mind, and saw that young Crawshay had good stuff in him. The ironmonger had been speculating in sending out iron pots to America, and his astute apprentice observed that, if the Americans used so many pots, they must want hooks to hang them on. Whereupon the master not only took the hint, but kindly determined that Crawshay should send them out, and that he would lend him the money for the purpose. Upon this venture was realised 100*l*., and from that time the farmer's son moved rapidly upwards, being first taken into partnership by his master, and ultimately becoming an iron king in South Wales, whose descendant, lately deceased has left, it is computed, above seven millions sterling. It is a curious fact that from this stock have arisen (in so short a time) two baronetages and one peerage—that of Llanover.

The arrivals at Swansea include—the Seaton, from Cherbourg, with 215 tons of iron ore, for R. Crawshay; Shields, from Lisbon, with a cargo of copper ore, for H. Bath and Son; Jewel, from Carloforte, with 320 tons of zinc ore, for H. Bath and Son; the Busy, from Carloforte, with 250 tons of zinc ore, for H. Bath and Son; Bon Pasteur, from St. Vincent, with 175 tons of zinc ore, for the Swansea Zinc Ore Company.

THE COLLIERS' STRIKE IN MONMOUTHSHIRE.—On Wednesday a large meeting of the Eastern Valleys colliers took place on the Garn, and a ballot took place to see whether the men employed at the Varteg and Varteg Hill Collieries should return to their work on the masters' terms. A great number were against the men submitting to the drop, but the result of the ballot showed the majority were in favour of such a proceeding, and on Thursday morning the men returned to their work. At Abercarne and Abertillery the hands are still on strike, and the efforts of Messrs. Jayne to induce colliers from Naut-y-Glo to work in their pits have proved fruitless.

REPORT FROM NORTH AND SOUTH STAFFORDSHIRE.

FEB. 20.—No decided change in the demand for Iron in South Staffordshire can be reported. In North Staffordshire, where wages have been reduced, there is rather more doing, whilst the Association of Ironmasters have taken no steps for the reduction of wages in the finished ironworks. The proprietors of blast-furnaces, who are another body, have, in many instances, effected a reduction of wages to the extent of about 10 per cent. In point of fact, the workmen appear ready to assent to any reasonable proposition. From having had scant work for a long time, and seeing so much poverty around them, they had no heart, and certainly no stomach, to resist. An account of the blast-furnaces now blowing in the South Staffordshire and East Worcestershire districts shows that there are now only 86 out of the 167 in operation, as against 97 at the end of last year, and 116 at the end of 1866 :—

		Built.	In blast.
WOLVERHAMPTON.			
Chillington	Chillington Iron Company	4	2
Wolverhampton	Assignees of J. Aston and Co.	2	0
Parkfield	Parkfield Iron Company	5	4
Millfields	Mrs. Gibbons	4	0
Priestsfield (New)	W. Ward and Sons	2	1
Osier Bed	Osier Bed Iron Company	3	1
Stow Heath	W. and J. S. Sparrow and Co.	4	2
Willenhall	Fletcher, Solly, and Urwick	3	2
BILSTON.			
Bilston Brook	Bilston Brook Company	3	2
Herbert's Park	D. Jones	1	0
Barbor's Field	Barbor's Field Company	2	2
Caponfield	J. Bagnall and Sons	3	2
Spring Vale	A. Hickman	3	1
Deepfields	W. E. Gibbons	3	1
Priorfield	H. B. Whitehouse	3	3
Stonefield	Stonefield Iron Company	1	0
Bradley	G. B. Thorneycroft and Co.	2	0
WEDNESBURY.			
Rough Hay	Addenbrookes, Smith, and Padcock	3	2
Old Park	Patent Shaft Company	3	3
Broadwaters	S. Groucott and Sons	3	2
Darlaston	Darlaston Iron and Steel Company	3	2
TIPTON.			
Wednesbury Oak	P. Williams and Sons	3	1
Willingsworth	J. Brayford	3	1
Tipton	Rhos Hall Company	2	0
Tipton Green	W. Roberts and Co.	4	4
Coneygree	Earl of Dudley	3	2
Park Lane	J. Colbourn and Sons	2	1
Horseley	J. Colbourn and Sons	2	2
Stour Valley	J. and S. Onions	2	2
Groveland	G. Hickman	1	1
Tividale	Round Brothers	2	2
WEST BROMWICH.			
Gold's Hill	J. Bagnall and Sons	3	2
Union	P. Williams and Co.	3	2
Crookhay	W. and G. Firmstone	4	3
Oldbury	Assignees of W. Bennett	4	0
WALSALL.			
Birchills	Williams Brothers	2	0
Hatherton	William Fryer	2	1
Birchills	John Jones	5	0
Bentley	Chillington Iron Company	2	1
Pelsall	B. Bloomer and Sons	2	1
Green Lanes	J. Jones	2	2
DUDLEY AND EAST WORCESTERSHIRE.			
Corngreaves	British Iron Company	6	3
Dudley Wood	N. Hingley and Sons	4	2
Withymoor	W. H. Dawes and Son	2	2
Netherton	J. and G. Onions	2	1
Windmill End	J. and G. Onions	2	1
Windmill End	Hickman and Co.	1	1
The Level	Earl of Dudley	4	2
New Netherton	M. and W. Grazebrook	2	2
Woodside	Cochrane and Co.	3	2
Old Level	Hall, Holcroft, and Pearson	3	0
Shutt End	J. Bradley and Co.	4	3
Oak Farm	Sir S. Glynne, Bart.	2	0
Corbyn's Hall (New)	B. Gibbons	4	2
Corbyn's Hall	W. Mathews	4	2
Russell's Hall	C. E. and J. Bradley	5	0
The Leys	W. and G. Firmstone	3	2
Dixon's Green	Assignees of W. Haden and Son	1	0
Parkhead	Evers and Martin	2	1
Total		167	86

A very pleasing circumstance has occurred in connection with the Parkfield Iron Company, near Wolverhampton. This concern, which employs some 500 persons, has been carried on through considerable difficulties for several years, under the direction of the managing partner, Mr. Henry J. Martin, C.E., brother of the barrister of that name. He has just been presented with a handsome silver inkstand by the various persons employed, and an address most complimentary to him accompanied the gift.

It is now reported that the unfortunate shareholders of the late Birmingham Bank will have to pay a call of 10*l*., which will only suffice, should it be generally paid.

The liabilities of Messrs. Joseph Welch and Sons, of Tipton and Deepfields, are about 11,000*l*. to 12,000*l*.

At the Birmingham Wagon Company (annual) meeting, to be held on Monday, the directors' report (to be submitted) states that they have again the pleasure of presenting a satisfactory statement to the shareholders, although the past year has been one of great commercial depression. Negociations had been entered into for the purchase of the wagons and part of the plant belonging to the Staffordshire Rolling Stock Company, which has resulted in the directors taking to both, on terms they consider advantageous to the interests of the shareholders. The company is now possessed of 6169 wagons, the whole of which are employed. The directors being of opinion that the only safe and wise policy to pursue is to maintain the stock of the company in the most perfect state of repair and efficiency, have expended during the last year the sum of 12,800*l*. 15s. 7d. for this purpose, which has enabled them, in addition to the ordinary repairs, to renew a large number of the wagons in the possession of the company in the early years of its existence. The nett profit for the past year amounts to 30,911*l*. 15s. 11d., and after deducting the interim dividend of 10 per cent. per annum on the ordinary capital, and the fixed charges paid in August, a balance remains of 21,683*l*. 10s. 6d., which it is proposed to appropriate in the following manner :—6737*l*. 14s. in payment of a dividend of 10 per cent. per annum on the original stock, and on the second issue of the ordinary capital, and 2925*l*. in payment of 6 per cent. per annum on the preference shares for the past half-year; 2188*l*. for depreciation of buildings and machinery; 6171*l*. 10s. 1d. to the reserve fund; and 3661*l*. 6s. 5d. to the credit of the revenue of the current year. The reserve fund will then amount to 50,000*l*. The borrowing powers of the company being nearly exhausted, the directors have thought it desirable to ask the shareholders' sanction to the borrowing powers being increased to 150,000*l*.

BULLION PRODUCT OF THE UNITED STATES OF AMERICA.

[*From our Correspondent.*]

The following table, taken from the official returns in the Treasurer's Department, at Washington, shows the collections on bullion assayed in each State and territory of the United States of America by private assayers during the fiscal year ending June 30, 1866 :—

States & Territories.	Bullion assayed.	Collections on bullion.
California	$49,020,250	$294,121·50
Colorado	219,860	1,319·16
Idaho	535,105	3,210·63
Missouri	815	4·89
Nevada	17,245,546⅔	103,655·68
New Jersey	13,688⅓	82·13
New York	7,295,803⅓	43,774·82
Oregon	4,785,231⅔	28,711·39
Pennsylvania	4,044,218⅓	24,265·31
Rhode Island	2,211⅔	13·27
Utah	60,278⅓	361·67
Washington	139,533⅓	837·20
Total value	$83,362,541⅔	$ 500,357·65

The foregoing compilation does not include the coinage of the United States mints at San Francisco and Philadelphia, nor the bullion assayed in the United States' Assay Office, in the city of New York. It only includes amounts of crude bullion assayed by private assayers, upon which they have retained from the amounts assayed one-half of 1 per cent. required by Act of Congress upon all crude bullion not before assayed, and paid the same to the Government tax collector. The coinage and assay of the Government Mints and Assay Office of crude bullion, amounting to upwards of $30,000,000, should be added to the above, swelling the gross product of gold and silver of the United States for the year to over $113,000,000. More than two-fifths of the entire bullion product of the State of Nevada was taken to California for coinage or assay, thus swelling the product of Nevada to $30,000,000, more than all the rest of the States and Territories put together, not including California. Most of the bullion product of Idaho was assayed in Oregon. Most of the bullion taken out in Colorado and Montana was assayed in New York and Pennsylvania.

The population of the State of Nevada is 40,000, and the product is $30,000,000 annually. This is an average of 150*l*. sterling to each inhabitant of the State, which, in proportion to population, is many times greater than in any other mining state or territory in the world. Nevada is now producing more than one-half of the silver produced in the world. The production of precious metals in the United States was as follows :—

From 1849 to 1857	$579,000,000
,, 1858 to 1860	137,500,000
,, 1861 to 1867	457,500,000
Aggregate product since 1849	$1,174,000,000

Careful estimates show that in extracting this sum there was a loss in reduction of at least 25 per cent., which amounts to $391,333,333, a sum in gold and silver greater than is held in all the vaults and depositories in the country. It is proposed to avoid these losses through the agency of a National School of Mines, to be established by Congress, similar in its general features to the great mining schools of Germany, France, and England. There has been a Bill already introduced in the United States Senate for the establishment of a National School of Mines, to be located at some central point in the mining region west of the Rocky Mountains. The Bill provides that the present tax of one-half of 1 per cent. on the bullion product of the county, amounting to about $500,000 annually, shall be applied to that purpose. It also provides that the School shall be under the control of a board of directors, to be appointed one from each State and Territory west of the Rocky Mountains. The chief branches to be taught therein to be geology, mineralogy, metallurgy, chemistry, assaying, and mining engineering. The Bill further provides that the receipts for the first half-year shall be applied to the erection of suitable buildings, and furnishing them with proper machinery, furnaces, and other appliances for the various metallurgical processes to be taught, all of which are to be built and furnished in the most economical manner consistent with the duty required. A commission in the meantime is to be sent to examine the principal mining schools of Europe, and procure all available information, so that the directors may be placed in possession of the most approved systems of instruction employed at such institutions.

The tuition in the School will be free to any citizen of the United States who may present proper evidence of qualification, and will also be open to the students from the schools of other countries, whose authorities shall duly recommend the applicants. The primary object of the School will be the increase of the bullion yield of the country, by the practical application of science to mining, and the diffusion of a more general and correct knowledge among miners as to the best methods of opening and working mines and treating ores. The faculty of the School will be required to collect mining statistics, and make annual reports to the Treasury Department, which will thence be communicated to Congress, and the country at large. Estimating the annual yield of bullion at 70,000,000, a systematic and thorough process of working the ore from which that amount is produced would undoubtedly swell the product to $100,000,000, while the amount of bullion attainable from the now rejected ores might be made to reach some $50,000,000 more. These estimates are based upon undoubted facts, and the much-needed improvements in the manner of mining, as well as the treatment of ore can best, if not only, be accomplished by the establishment of an institution similar to that contemplated by the proposed School of Mines.

The Congress of the United States has manifested a good disposition towards the mining interest of the county, both by the appointment of a Commissioner for the collection of statistics, and the passage of the Mineral Land Law, whereby a fee-simple title is secured to the mines in the shape of a patent from the Government at a nominal cost, with no royalty to the Government, as is common in other countries.

MINING IN CALIFORNIA.—The able report by Mr. Lewis Chalmers upon the property of the Imperial Silver Quarries Company (already referred to in the Journal) has been supplemented by an equally satisfactory statement by Mr. James Jones, M.E. It appears that Mr. Jones discovered the prominent mines in that district, and is a large shareholder in the Imperial Silver Quarries Company. He computes that the total amount to be expended upon tunnelling, so as to develope nine well-defined or ascertained silver mines, including drifts from tunnel, and also ore-house, with tools, &c., will be 41750*l*.; but long before this amount has been absorbed large profits must necessarily be realised, derived from ore taken from the silver mine, which will be worked simultaneously with the progress of the tunnel. The largest and most valuable portion of the silver ore should be shipped in its natural state to Swansea or other ports in this country, either for sale or reduction into bullion. The additional expense connected with mill machinery should be regarded as an investment of capital, by which the estimates in the prospectus may be realised, according to which 50 tons of ore per day, yielding only 25*l*. per English ton, would leave an annual nett profit of 260,000*l*., or more than equal to 50 per cent. upon the share capital of the company. It is stated that the mill would always sell for more than the sum invested in its construction. Mr. Jones states that if Mr. Chalmers runs drifts upon nine lodes, which are named, before the tunnel reaches the "Manchester lode"—a distance of 1240 ft.—he will be able to take out 500 tons of silver ore daily; within 30 days after, these drifts being further advanced so as to allow more men to work, Mr. Chalmers may take out at least 1000 tons daily, increasing the quantity as he increases his force, and at a proportionately less expense. Although Mr. Chalmers' report confirms the statements in the prospectus as to the existence of 27 well-defined silver mines, Mr. Jones asserts that including the rich "blind lodes"—lodes not apparent by their outcrops—the tunnel in its extreme length of 4000 ft. will develope for practical working probably not fewer than 40 silver mines. Attention is directed to the fact that the deeper the excavations the richer the silver ore becomes, while the lodes increase in thickness. The machinery, referred to in Mr. Chalmer's report, will be able to reduce only 50 tons of silver ore per day (as stated in the prospectus), but any quantity may be shipped in its natural state to England for reduction. The cost of taking out the silver ore will not exceed, even during the first three months, 8s. 4d. per ton, while it can be forwarded and shipped at San Francisco for 5*l*. per ton, the freight to any port in England being 3*l*. per ton. So that the ore can be brought to an English market, including all charges, for about 8*l*. per ton. It is suggested that Mr. Chalmers should be instructed to ship to England any ore assaying over 25*l*. per ton in its natural state. Even with the present opportunities of transport, 100 tons daily could be easily forwarded to San Francisco for shipment. Mr. Jones also states that Mr. Chalmers can, without doubt, select that amount of ore from the immense quantities at his disposition, quite as rich, if not richer, than the Tarshish Mine ore, which (according to Mr. Chalmers' report) assays about 100*l*. per English ton. It will thus be evident that the Imperial Silver Quarries Company may make enormous and increasing profits, consequent upon the vicinity of the property to available lines of railway communication with the sea board, by steady shipments to England of the best silver ores in their crude state, without reference to the additional quantities reduced into bullion at their own local mills. Estimating the shipments of silver ore made to England not to exceed 100 tons per day, and the value not to exceed 50*l*. per ton, the nett profit per month would amount to 104,000*l*., equal to a dividend of over 20 per cent. per month from this portion of the business alone. The Official Government returns of a silver mine within 30 miles of this property, and working only 1200 ft. on one lode (which is believed to be the geological continuation of the Imperial Constitution Silver Lode), which show that it has paid dividends of 500 per cent. per month to its shareholders. Mr. Jones believes that Mr. Chalmers will be able to commence shipping silver ore by the middle of May.

TESTIMONIAL TO A MINE DOCTOR.—A handsome testimonial, consisting of a watch and chain, was presented to Dr. Robinson, the medical officer at the Chontales Mines, on new year's day. The healths of the Queen of England and of the President of Nicaragua were drunk. The testimonial emanated from certain inmates of the hospital, and it was mentioned that all had participated in the gift.

HOLLOWAY'S PILLS AND OINTMENT—THE WANDERER.—For all complaints ordinarily affecting mankind, whether internal or external, nothing can compare with these peerless remedies. Young and old of both sexes may use them with certain success and perfect safety; they are equal efficacious in hot and cold climates; no change of temperature or long keeping impairs their curative properties, which never deteriorate, and are, therefore, especially adapted for emigrants and officers or gentlemen whose pleasures or duties lead them to foreign countries and various climates. These remedies any man can safely prescribe with the absolute certainty that he cannot do wrong; they purify, and purifying must be beneficial, not only for the cure of the present ailment, but for security against future disease.

Contract for Coals for Barbadoes.

CONTRACT DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.

THE COMMISSIONERS for Executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, do hereby give notice that, on TUESDAY, the 3d March next, at Two o'clock, they will be READY to TREAT with such persons as may be WILLING to CONTRACT for SUPPLYING and DELIVERING into store at Barbadoes,

TWO THOUSAND FIVE HUNDRED TONS OF SMOKELESS SOUTH WALES COALS.

Fit for the service of Her Majesty's steamships and vessels.

One-third of the coals to be shipped by the 31st March, another third by the 30th April, and the remainder by the 31st May next.

A form of the tender and conditions of contract may be seen in the lobby of the Storekeeper-General's Department, Admiralty, Somerset House.

No tender will be received after Two o'clock on the day of treaty, nor will any be noticed unless the party attends, or an agent for him, duly authorised in writing.

Every tender must be addressed to the Secretary of the Admiralty, and bear in the left-hand corner the words "Tender for Coals for Barbadoes," and must also be delivered at the Department of the Storekeeper-General, Admiralty, Somerset House, accompanied by a letter signed by two responsible persons, engaging to become bound with the person tendering in the sum of £25 per cent. on the value for the due performance of the contract.

By order, ANTONIO BRADY,
Registrar of Contracts and Public Securities.

Contract Department, Admiralty, Somerset House, Feb. 13, 1868.

Contracts for Coals and Coke.

CONTRACT DEPARTMENT, ADMIRALTY, SOMERSET HOUSE.

THE COMMISSIONERS for Executing the Office of Lord High Admiral of the United Kingdom of Great Britain and Ireland, do hereby give notice that on TUESDAY, the 10th March next, at Two o'clock, they will be READY to TREAT with such persons as may be WILLING to CONTRACT for SUPPLYING and DELIVERING at the Extension Works at Her Majesty's Dockyard at Chatham,

EIGHT THOUSAND FIVE HUNDRED TONS OF COALS AND ONE THOUSAND TONS OF COKE, for brickmaking purposes, and TWO THOUSAND FIVE HUNDRED TONS OF COALS for steam-engines.

Tenders may be made for the supply of all or either of the above quantities.

Forms of the tenders and conditions of the contracts may be seen in the lobby of the Storekeeper-General's Department, Admiralty, Somerset House.

No tender will be received after Two o'clock on the day of treaty, nor will any be noticed unless the party attends, or an agent for him duly authorised in writing.

Every tender must be addressed to the Secretary of the Admiralty, and bear in the left-hand corner the words "Tender for Coals and Coke," and must also be delivered at the Department of the Storekeeper-General, Admiralty, Somerset House, accompanied by a letter signed by two responsible persons, engaging to become bound with the person tendering in the sum of £20 per 100 tons for the due performance of the contract.

By order, ANTONIO BRADY,
Registrar of Contracts and Public Securities.

Contract Department, Admiralty, Somerset House, Feb. 17, 1868.

Barrack Contracts for the Supply of Coals, Coke, Turf, Candles, and Kindling Wood in Great Britain and Ireland.

WAR OFFICE, PALL MALL, LONDON, S.W.

NOTICE IS HEREBY GIVEN, that the Secretary of State for War is prepared to RECEIVE TENDERS for the SUPPLY of COALS, COKE, TURF, CANDLES, and KINDLING WOOD at the various Barrack Stations in Great Britain and Ireland, for a period of twelve months from the 1st April next.

Tenders will not be entertained unless made upon the proper printed form, which may be obtained, with every requisite information, upon application at this office, or to the various barrack masters, between the hours of Ten and Four o'clock each day, Sundays excepted.

The Tenders must be sent to this office, addressed to the Director of Contracts, marked on the outside "Tender for Coals," &c., on or before Saturday, 29th February, 1868, after which day no tender will be received.

The Secretary of State for War reserves the right of rejecting any or all of the tenders.

THOMAS HOWELL, Director of Contracts.

War Office, Pall Mall, London, S.W., Feb. 14, 1868.

Caution—Dog Licenses.

INLAND REVENUE OFFICE, SOMERSET HOUSE.

THE COMMISSIONERS OF INLAND REVENUE give notice that all DOG LICENSES, granted in the year 1867, EXPIRED on the 31st December last, and that every person keeping a dog in the current year is REQUIRED to TAKE OUT A NEW LICENSE, the duty payable for each dog kept being five shillings.

The penalty for keeping a dog without license is £5, and proceedings will be taken for the recovery of such penalty in all cases of default.

Post Office orders payable at the Chief Money Order Office. Inland Revenue receipt stamps, or postage stamps, may be remitted in payment of duty on dogs kept in London and its vicinity to the undermentioned collectors of Inland Revenue, or such licenses may be obtained on personal application at the offices of said collectors on any day from Nine to Three o'clock:—

Collector, London West, Somerset House, W.C.
Collector, London Central, Winchester-buildings, Winchester-street, E.C.
Collector, London East, Tower-hill, E.C.
Collector, London South, Elephant-buildings, Newington-butts, S.
Collector, London North, 133, Great Portland-street, W.

Licenses may also be obtained on personal application on any day until the 29th February inst., at the following places, between the hours of Ten and Four:

Gresham House, Old Broad-street, E.C., Supervisor's Office.
Stepney: 31, Stepney-green, Supervisor's Office.
Dalston and Hackney: 229, Hackney-road, Supervisor's Office.
Islington and Holloway, and Highgate: 6, Pullen's-row, Supervisor's Office.
Paddington: 9, Porteous-road, Harrow-road, Supervisor's Office.
Hampstead and Camden Town: 40, Gloucester-street, Camden Town, Supervisor's Office.

WM. CORBETT, Secretary.

Inland Revenue Office, Somerset House, February, 1868.

Canterbury Waterworks—To Pipe Founders.

THE DIRECTORS of the CANTERBURY GAS and WATER COMPANY are prepared to RECEIVE TENDERS, Contract No. 9, for the SUPPLY and DELIVERY of about

EIGHT HUNDRED TONS of CAST-IRON SOCKET PIPES,

Varying from 12 inches to 3 inches internal diameter.

The specification and forms of tender may be seen on and after Thursday, the 20th of February inst., at the company's offices, Castle-street, Canterbury, and at the office of Mr. S. C. Homersham, 19, Buckingham-street, Adelphi, London, the company's engineer.

Sealed Tenders, endorsed "Tender for Cast-iron Pipes," Contract No. 9, to be addressed to me at the Secretary's Office, Castle-street, Canterbury, on or before Tuesday, 3d of March next.

By order,
Canterbury, 14th February, 1868. JAMES BURCH, Secretary.

SMITH AND FORREST,

ROSIN DISTILLERS, GREASE AND VARNISH MANUFACTURERS,
HOLT TOWN OIL WORKS, MANCHESTER,
MANUFACTURERS OF VEGETABLE OILS, &c.

ANTI-FRICTION GREASE, 10s. to 14s. per cwt.
Wire rope ditto, free from acid, 15s. per cwt. Liquid ditto (between thick and thin), for trams, &c., 8s. to 12s. per cwt.
SKIP, HUTCH, CORVE, and WAGON OILS, from 8s. to 12s. per cwt.
TORCH OIL, 1s. to 1s. 6d. per gallon.
COPPER-SPOUTED QUART LAMPS, 4s.; TORCH WICK for ditto, 6d. per lb.
PATENT ANTI-CORROSIVE BLACK VARNISH,
"Paint Substitute for Wood or Iron," ready for use, 1s. to 2s. 6d. per gallon.

We shall be glad to furnish a detailed price-list on application.
Orders by post receive prompt attention.

HERBERT AULT, ENGINEER,

DRAUGHTSMAN AND PATENTEES' ASSISTANT,

VALUER OF MACHINERY, IRONWORKS, RAILWAY and COLLIERY PLANT, and other works; DESIGNER and CONTRACTOR for every description of RAILWAY and COLLIERY PLANT, CONTRACTORS' and other LOCOMOTIVES, HOT AIR and HOT WATER APPARATUS, &c,

Preparer of models &c., for patentees, and every other assistance given upon the most moderate terms. Estimates given for taking down and erecting works and other machinery.

Applications addressed to HERBERT AULT, Netherton, near Dudley, will meet with prompt attention.

N.B.—HERBERT AULT begs to call the attention of gentlemen about to put up greenhouses or conservatories to his large assortment of designs at exceedingly low prices.

GREASE'S NEW AND IMPROVED PNEUMATIC TUNNELLING ENGINE.

THE PROPRIETORS of this INVENTION, in order to bring its CAPABILITIES more prominently before the PUBLIC, are OPEN to TAKE CONTRACTS for DRIVING LEVELS.

Preference will be given to ADIT LEVELS and those places where ROTATORY MACHINERY is in use, and can be applied to driving the AIR COMPRESSOR.

Address—E. S. GREASE, 7, Hoe-street, Plymouth.

THE NEWCASTLE CHRONICLE AND NORTHERN COUNTIES ADVERTISER. (ESTABLISHED 1764.)
Published every Saturday, price 2d., or quarterly 2s. 2d.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the GOONINNIS MINING COMPANY (LIMITED).—By an Order made by His Honor the Vice-Warden of the Stannaries, in the above matter, dated the 20th day of February instant, on the petition of James Saunders the elder, a contributory and also a creditor of the said company, IT WAS ORDERED that the said GOONINNIS MINING COMPANY (LIMITED) be WOUND-UP by this Court under the provisions of the Companies Act, 1862.

HODGE, HOCKIN, AND MARRACK, Solicitors, Truro.

Dated Truro, February 20, 1868.

In the Court of the Vice-Warden of the Stannaries. Stannaries of Cornwall.

IN the MATTER of the COMPANIES ACT, 1862, and of the PELYN WOOD MINING COMPANY.—By the direction of His Honor the Vice-Warden, notice is hereby given, that on the 11th day of March next, at the Registrar's Office, at Truro, in the county of Cornwall, at Eleven o'clock in the forenoon, this Court will PROCEED TO MAKE A CALL OF TWO POUNDS PER SHARE on all the contributories of the said company settled on the list of contributories under class A.

All persons interested therein are entitled to attend at the time and place aforesaid to offer objections to such call. WM. MICHELL, Registrar.

Dated Registrar's Office, Truro, 22d February, 1868.

On TUESDAY, 25th FEBRUARY, 1868.

VALUABLE COLLIERY PLANT

(Only a short time in use),

BY AUCTION.

TO BE SOLD, at OVERTON AND COMRIE BANK COLLIERIES, EAST GRANGE STATION, near DUNFERMLINE, on TUESDAY, 25th FEBRUARY.

MESSRS. P. BURN AND SON beg to intimate that they are instructed TO SELL the PLANT and UTENSILS at said Collieries, including:—

Powerful horizontal horse-power ENGINE, 30 in. cylinder, 6 ft. stroke, complete, with pumping gear.
Crosshead WINDING ENGINE, 12 in. cylinder, 2 ft. 8 in. stroke.
FIVE egg-end STEAM BOILERS and mountings, 30 ft. by 5 ft.
Powerful CRAB WINCHES.
INDEX LEVER HUTCH-WEIGHING MACHINES.
PUMP PIPES, PITHEAD FRAMES, PIT RAILS, PLATES, PIT ROPES.
40,000 composition bricks, and general colliery fittings.
Also, 4000 tons first-class CANNEL COAL.

On view two days before the sale, and catalogues had on application at the MINING JOURNAL Office, 26, Fleet-street, London, E.C.

Sale to begin at Twelve o'clock.

P. BURN AND SON, Auctioneers.

9, Exchange-place, Glasgow, 1st February, 1868.

PRELIMINARY ANNOUNCEMENT.

LANCASHIRE STEEL COMPANY (LIMITED).

MR. WHEATLEY KIRK is honoured with instructions from the Official Liquidators of the Lancashire Steel Company (Limited) to SELL, BY AUCTION, shortly, at the Clarence Hotel, in Manchester, the EXCEEDINGLY VALUABLE PROPERTY, constituting their PATENT FILE WORKS AT MANCHESTER, viz.:—Land, buildings, steam-engines, boilers, shafting and mill-gearing, steam, water, and gas pipes, plant, machinery, utensils, &c.

Full particulars in future papers, or, in the interim, of Messrs. SLATER and BARLING, solicitors, 4, Norfolk-street; or of F. H. JEWSBURY, Esq., and THOS. BROWNING, Esq., official liquidators, 108, King-street; or the auctioneer, 8, Essex-street, King-street, Manchester.

BRIXHAM, DEVON.

RED HEMATITE IRON ORE MINE SETT or LEASE, with BUILDINGS, consisting of SMITHS' SHOP, STABLES, ACCOUNT HOUSE, TO LET, and all the MATERIALS, MACHINERY, and PLANT upon the mine, together with a quantity of ore. Can be taken at a valuation.

The length of sett is about 300 fms. east and west upon the course of the lode. There are two firm substantial shafts sunk in the lime rock—one west, 21 fm. level cross-cut driven, and lode cut; found to be very productive, being 4 fms. wide, and from which 300 tons of ore has been taken.

The other shaft is sunk east, also in lime rock, to the 24, and cross-cut driven 13 fms.: here the lode in all probability can be cut with a little further outlay.

The mine is situated at a distance of only two miles, with a good road, from the harbour, where vessels are always obtainable at 3s. per ton freight, either to the North or Wales. There are two mines directly east and west of the boundary at present in full work upon the same lode. From the one east about 1000 tons a month has been taken for many years, and from the one west, only opened about two years since, 50,000 tons has been raised.

To view the mine, apply to Mr. F. WINTLE, Castor Farm, Brixham, Devon, of whom all necessary information may be obtained, as well as Dr. Noad's analysis of the ore.

QUELLYN SLATE QUARRY, NORTH WALES.

TO BE SOLD, BY PRIVATE CONTRACT, the LEASE of the QUELLYN QUARRY. It is situated about eight miles from CARNARVON, on the road to BEDDGELERT.

The works have been in operation about four years, during which time a great amount of preparatory work has been done, and, so far as the quarry has been opened, it promises to be a first-class investment. The slate is of good quality, of a beautiful blue colour, without any spots or stripes, and the cleavage is excellent. There is a never-failing supply of water, which may be made available for working the quarry on the lower levels. There is also good tipping ground for the rubbish. During the last six months, although only a limited number of men have been employed, nearly 100,000 slates have been made, specimens of which may be seen at Carnarvon.

The lease is dated July 9, 1864, and is for a term of 30 years, with power of renewal for 30 years, on payment of one year's royalty for such renewal. The dead rent is £10 per annum, and the royalty 2s. per ton on all marketable slates. The working plant may be taken at a valuation.

For further particulars, apply to Messrs. JOHN CLAY and WILLIAM FARFORTH, 20, Cow-green, Halifax, or to Mr. EDWARD HUMPHREYS, Royal Hotel, Carnarvon.

THE LLANFAIR GREEN AND BLUE SLATE COMPANY (LIMITED).

IN LIQUIDATION.

The Liquidators of the above-named company are desirous to DISPOSE OF the LEASE of the QUARRY thereto belonging, which is situated at LLANFAIR, near HARLECH, in the county of MERIONETH, NORTH WALES.

The original lease of this property, which bears date 21st November, 1862, is held by assignment to the company, and is for a term of 21 years, with a proviso for a renewal for a further term not exceeding 21 years, subject to the same terms as are contained in the present lease, which include a dead rent of £30 per annum, or a royalty of one-fourteenth of the produce.

The works for the development of this quarry have been in operation since July, 1863, and a considerable amount of tunnelling, roofing up, &c., has been done, the blue vein having been passed through in four levels, and the green vein in one level at the upper part of the quarry, and the whole of the levels are thoroughly ventilated.

Applications to view the quarry are to be addressed to Mr. MORRIS JOHN EVANS, of No. 1, Rock-terrace, Harlech, who will show all the workings and give any information that may be required; and tenders for the purchase thereof may be sent addressed to "The Liquidators of the Llanfair Green and Blue Slate Company (Limited), 13, Old Jewry-chambers, London, E.C.," on or before the 30th day of March next.

The remainder of the slates now at the quarry, and the working plant, may be taken at a valuation.

The Liquidators do not bind themselves to accept the highest or any tender that may be made to them.

CHARLES DOWNES, } Liquidators.
JOHN RAE, }

13, Old Jewry Chambers, London, E.C., Feb. 4, 1868.

FOR SALE, BY PRIVATE CONTRACT,

SPARE MACHINERY, &c., viz.:—

ONE 80 in. cylinder PUMPING ENGINE, with THREE BOILERS and balance-bob, &c., complete.
ONE 72 in. cylinder PUMPING ENGINE (Bull), with TWO BOILERS, &c.
ONE 24 in. cylinder WINDING ENGINE, BOILER, cage, &c.
ONE 26 in. cylinder WINDING ENGINE, TWO BOILERS and steam capstan attached.
ONE 36 in. cylinder STAMPING ENGINE, BOILER, &c., with cast-iron axle for 60 heads, nearly new; 14 ft. calciner, complete.
Between 300 and 400 first-rate PUMPS from 6 to 20 inch, with windbores, matchings, H pieces, &c., &c.; 14 plunger poles from 7 to 20 in., with stuffing boxes and glands to fit.
A quantity of hammered iron rod plates, rod pins, staples and glands, &c; a quantity of pitch pine and other main rods from 10 to 15 in.; 2 capstans and 3 shears; capstan rope, chains, and a variety of other articles.

For viewing the same, apply to the Agents.

Further particulars may be had of Mr. WM. POLKINGHORNE, the purser, at the mine; or of WM. WEST, Esq., C.E., Tredenham House, St. Blazey.

Dated Par Consols Mine, Par Station, Cornwall, 21st November, 1867.

FOR SALE, on most advantageous terms, TWO FIRST-CLASS PUMPING LIFTS, one a plunger lift, with 15½ in. pole, 10 ft. stroke, with 17 in. trees, from 67 to 70 yards in length, all complete, and nearly new; also, a drawing lift, 17 in. diameter, with new working barrel, door piece, clack piece, and windbore, complete, about 70 yards in length. The whole are on the bank all in excellent condition, and may be removed at once, terms being agreed upon.

The pumps are conveniently situated for removal, being within four miles of the Mostyn Station, on the Chester and Holyhead line.

For price and particulars, apply to Mr. J. PRYOR, New-street, Mold.

FOR SALE, a PORTABLE STEAM ENGINE of 25 horse power. Winding gear to order to suit circumstances. SECOND-HAND PORTABLE STEAM ENGINES, with new MORTAR MILLS, SAW TABLES, &c., on advantageous terms.

Apply to Messrs. BARROWS and CARMICHAEL, Engineers, Banbury, Oxon.

NORTH STAFFORDSHIRE.

TO BE SOLD, and may be NEGOCIATED FOR BY PRIVATE TREATY, all that VERY VALUABLE FREEHOLD ESTATE, known as

THE WOODSHUTTS ESTATE,

comprising several FARMS and LANDS, situate near to HARECASTLE STATION, on the North Staffordshire Railway; together with the WHOLE of the VALUABLE MINES OF COAL thereunder and under adjoining lands (not the property of the vendor).

The surface of the estate comprises an area of 290 acres, or thereabouts.

The total area of the mineral is 360 acres, or thereabouts.

The whole of the mines are in lease to the Woodshutts Colliery Company for a term of 35 years, and a good income is derived from this portion of the property.

For further particulars, or to treat for the same, application may be made to LANCELOT L. HASLOPE, Esq., Chesterton, near Newcastle, Staffordshire (who will show the property); to J. T. WOODHOUSE, Esq., Derby; or to Messrs. BRIDGES, SAWTELL, HEYWOOD, and RAM, solicitors, 23, Red Lion-square, London.

COAL MINES, NEAR WREXHAM.

THE OWNERS of the GATEWEN ESTATE, near WREXHAM, are DESIROUS of RECEIVING TENDERS for a MINING LEASE of the COALS and MINERALS lying under the ESTATE of GATEWEN, containing about TWO HUNDRED ACRES, situate within two miles of the town of Wrexham.

The Westminster and the Broughton Coal Companies Mines are successfully worked up to the boundary of the estate, which has extensive frontages to good roads, and is in immediate proximity to the Wrexham and Minera Railway.

For further particulars, apply to Messrs. EDEN, STANISTREET, PEARS, and LOGAN, solicitors, Liverpool; Mr. W. H. ANTHONY, solicitor, Liverpool; or to Messrs. FRANCIS, WEBSTER, and RICHES, solicitors, Cambridge.

TIN PLATE WORKS.—TO BE DISPOSED OF, the REMAINING TERM in a LEASE of a VALUABLE TIN PLATE WORKS, now in full operation, and capable of turning out from 700 to 800 boxes weekly. Well situated for London and Liverpool delivery. Machinery, engines, &c., in perfect condition, with a good family residence and some land; or the same may be arranged at a yearly rental.

Application, by letter, to E. L. BAGOT, Esq., C.E., Llanelly, Carmarthenshire.

THE SPITTY COPPER WORKS.

TO BE LET, THE SPITTY COPPER WORKS, situate on the LOUGHOR RIVER (which is navigable), in the parish of LLANELLY, in the county of CARMARTHEN, four miles from the town and port of Llanelly, and eight miles from the town and port of Swansea, comprising TWENTY-FOUR COPPER FURNACES and CALCINERS, TALL STACKS, SMITHS' and CARPENTERS' SHOPS, STABLES, OFFICES, &c.

These works lie between, and are convenient to, the Great Western and the Llanelly and Llandilo Railways, thus affording facilities of using the broad and narrow gauge.

For further particulars, and to treat, apply to OLIVER GREEN, Esq., 3, Mitre-court Chambers, Temple, London; or to Mr. WILLIAM ROSSER, Land Agent, Llanelly.

COUNTY OF WICKLOW.

TO BE LET, on such terms as may be agreed upon, the

GLENMALUR LEAD MINE,

In the townland of BALLINAFUNCHOGE, barony of BALLINACOR NORTH and county of WICKLOW.

The mine is situate on the east side of the valley of Glenmalur, about eight miles from the town of Rathdrum, in a mineralised district of great promise. It has been worked for a considerable time up to a recent period, and was very productive. A large water-wheel, connected with a pumping apparatus, is at present employed keeping the workings clear of water. A railway is laid through, and in the adit level. Abundant supply of water power is available from the Avonbeg River adjoining, and other sources. Timber for use of the mine can be obtained on advantageous terms on the grounds. Houses suitable for the superintendents and workmen, offices, and workshops, are on the premises, and land can be given for any further accommodation that may be necessary.

Parties desirous of proposing for the mine can obtain particulars as to its extent, state, and conditions on which it will be let, on application to JOHN HILL, Esq., Civil Engineer, Ennis.

Proposals will be received by Messrs. G. and R. K. JOHNSTON, Dundalk.

FOR SALE, a BEAM ENGINE, cylinder 40 in. diameter, 8 ft. stroke, fitted with condenser, air-pump, brass valves and seats, hand gear, and all necessary connections, parellel motion, &c.

Suitable for pumping or blast purposes; in good working condition; and will be sold cheap.

For further particulars, apply to STEEL, RAKE, and Co., Engineers, Newport, Monmouthshire.

New and greatly improved Edition.
In three volumes, medium 8vo., with above 2000 woodcuts, price £4 14s. 6d. cloth, or £5 12s. half-bound in Russia.

URE'S DICTIONARY OF ARTS, MANUFACTURES, AND MINES, containing a Clear Exposition of their Principles and Practice. Sixth Edition, chiefly rewritten, and greatly enlarged. Edited by

ROBERT HUNT, F.R.S., Keeper of Mining Records;

assisted by numerous contributors eminent in science and familiar with manufactures.

"Ure's Dictionary has long been a standard work of reference on the subjects of which it treats; and the present greatly improved edition, which is written up to the most recent discoveries, will strengthen its position in the esteem of men of science."—*Athenæum.*

* * * "In this genuine way the work is done from beginning to end. The chief care has evidently been for thorough revision that shall maintain the character and extend the utility of a standard work of reference, which upon its own ground is without a rival; and in this land of manufacturers and miners, as its extensive usefulness becomes more and more widely known, will not pass slowly through many editions."—*Examiner.*

London: LONGMANS, GREEN, and Co., Paternoster-row.

New Edition, corrected and enlarged, in 8vo., price 12s.,

THE PRACTICAL MINERS' GUIDE: Comprising a Set of Trigonometrical Tables adapted to all the purposes of Oblique or Diagonal, Vertical, Horizontal, and Traverse Diallings, with their application to the Dial, Exercise of Drifts, Lodes, Slides, Levellings, Inaccessible Distances, Heights, &c. By J. BUDGE.

London: LONGMANS, GREEN, and Co., Paternoster-row.

Now in the Press, price 5s

STATISTICS OF THE MINES OF CORNWALL AND DEVON, WITH OBSERVATIONS UPON THEM. By THOMAS SPARGO, STOCK and SHAREDEALER, GRESHAM HOUSE, OLD BROAD STREET, LONDON, E.C.

I beg to inform the mining interest that my work, under the above title, will be issued at the end of this month. It will contain the following particulars—viz., the geological position, present prospects, names of purser, manager, and secretary, with statement of the annual returns of each mine during the last two years, and of total dividends paid to the present time. The work will be illustated by a map of Cornwall and Devonshire; geological district maps, divided into eight sections, in which will be shown the boundary lines of each parish, height of hills, sources of rivers, &c.; maps of St. Just, St. Ives, Marazion, Helston, Gwinear, Chiverton, Bodmin, Liskeard, Devon Great Consols, Ashburton, and Exmouth mining districts, showing boundary lines of each property, with the lodes, &c., traversing them.

It will also contain transverse and longitudinal sections of Dolcoath Mine (kindly supplied by Captain Charles Thomas); section of workings in Botallack Mine (supplied by the manager, S. H. James, Esq.); longitudinal sections of workings upon the main lode in Great Wheal Vor and Fresavean Mines; geological map of the Fowey district (supplied by Major Davis, R.M.); historical account of the Devon Great Consols, and of all the principal mines in the two counties.

PEAT, PEAT FUEL, AND PEAT CHARCOAL, HOW TO MANUFACTURE ECONOMICALLY, By WILLIAM ELSAM

(Late Manager of the Blaen Pellenna Peat Charcoal Works).

Gratis on application to—
ELSAM and Co., 38, Upper Thames-street, London; 44, High-street, Bristol.
WILLIAM ELSAM, Palmerston Villa, Knowle, Bristol.
Or forwarded on receipt of stamp and address.

Now ready,

THE MONEYS OF ALL NATIONS, WITH THEIR CORRECT VALUE IN ENGLISH CURRENCY. Six copies sent free by post on receipt of two penny stamps.

Address, T. ROBERTS and Co., 8, Cranc-court, Fleet-street, London, E.C.

ASSAY OFFICE AND LABORATORY, No. 2, CROWN CHAMBERS, CROWN COURT, THREADNEEDLE STREET, CONDUCTED BY W. T. RICKARD, F.C.S., &c. (Late MITCHELL and RICKARD).

Assays and analyses of every description of mineral and other substances, manures, &c.

Gentlemen going abroad for mining purposes instructed in assaying, and the most improved methods of reducing gold, silver, and other metals.

MINING PROPERTIES INSPECTED AND REPORTED ON.

BRITISH, COLONIAL, AND FOREIGN PATENTS REGISTRATION OF DESIGNS, COPYRIGHTS, TECHNICAL TRANSLATIONS, DRAWINGS, &c.

MR. MICHAEL HENRY,
Memb. Soc. Arts, Assoc. Soc. Engineers, Author of the "Inventors' Almanac," and the "Defence of the Present Patent Law."

PATENT REGISTRATION AND COPYRIGHT AGENT AND ADVISER.

Inventors advised in relation to Patents and Inventive and Industrial Matters. Printed information sent free by post. Specifications drawn and revised. Searches conducted. Abstracts, Cases, and Opinions drawn.

Translations of Catalogues, Trade Notices, and Circulars for the approaching Paris Exhibition. Mr. HENRY has had especial experience in technical French, and in French Manufacturing and Commercial Matters.

Offices, 68, Fleet-street, E.C., London, corner of and entrance in Whitefriars-street.

RAILWAY WAGON WORKS, BARNSLEY

MESSRS. G. W. AND T. CRAIK
ARE PREPARED TO
SUPPLY COAL AND COKE WAGONS
OF EVERY DESCRIPTION,
Either for cash, or by preferred payments through wagon-leasing companies.

WAGONS PROMPTLY REPAIRED.

THE BEVERLEY IRON AND WAGON COMPANY
(LIMITED),

MANUFACTURERS OF RAILWAY WAGONS, WHEELS AXLES, LORRYS, CARTS, WOOD WHEELS, &c.,
IRONWORKS, BEVERLEY, YORKSHIRE.

THE RAILWAY SPRING COMPANY (LIMITED),
DIAL WORKS, WEST BROMWICH,

MANUFACTURERS OF
RAILWAY, WAGON, AND CARRIAGE SPRINGS.
Orders executed with the utmost dispatch, of first-rate quality, and on moderate terms.

BAGILLT OIL COMPANY (LIMITED),
FLINT.

MANUFACTURERS OF BLACK GREASE
FOR COLLIERY WIRE ROPES, TRAMS, WAGONS, &c., £5 PER TON
TORCH AND LAMP OIL, 1s. PER GALLON (Casks free).
LUBRICATING OIL, 1s. PER GALLON (Casks free).

COMPRESSED FUEL
(BIRD'S PROCESS)

CAN BE MADE EVEN BY HAND-PRESS LABOUR AT THE PIT'S MOUTH, or at any WHARF or YARD where COAL or COKE DUST is obtainable.

The loss of dust by frequent transport, waste of "smalls" from falling unconsumed between the furnace-bars, or being driven up the chimney by the draught, and consequent choking up of flues, is diminished by this process.

The foreign matter in admixture being but one-half per cent. to the ton, and of a nature to ensure perfect combustion, the coal or coke treated remains unspoilt.

Drying is very rapid, and no artificial system needed.

Gluten, cement, and all ingredients needed for mixing can be supplied in bags as required. License fee, £10; royalty, 3d. per ton.

Apply to— JAMES BIRD,
No. 2, LAURENCE POUNTNEY HILL, CITY, LONDON.

UTILISATION OF COAL DUST AND MANUFACTURE OF ARTIFICIAL FUEL.
BARKER'S PATENTS.

THE LONDON PATENT COAL COMPANY (LIMITED) having purchased the sole rights to these patents throughout the United Kingdom, are now granting licences to coal owners and others for the use of the invention.

The process is simple and inexpensive; the cost of manufacture, including the amalgamating material, being only 2s. per ton.

The fuel is without smell, and is available for all the uses of ordinary coal. It occupies 33 cubic feet of space per ton only, as against 42, the Admiralty measurement for coal. In the various tests it has undergone it has in every instance beaten similar round coal in evaporative power, weight for weight.

For particulars of these trials, and every information respecting the patents, apply to the Managing Director, or the Secretary, 26, Martin's-lane, Cannon-street, London, E.C.

TO COLLIERY PROPRIETORS AND OTHERS.

IMPROVED PATENT COAL SCREENS,
FOR SCREENING AND TIPPING COALS DIRECT FROM THE PIT WAGON INTO RAILWAY WAGONS,
MANUFACTURED BY
JAMES MOWLE AND CO., FOUNDRY, CHESTER.

MAKERS of STEAM-ENGINES and BOILERS, PUMPS, and all kinds of MACHINERY for MINES.

COAL CUTTING MACHINERY.—The WEST ARDSLEY COMPANY having, by recently patented improvements, perfected their coal cutting machinery, worked by compressed air, are NOW READY to MAKE CONTRACTS for the CONSTRUCTION and USE of their MACHINES.

The results of twelve months' experience in the working of these machines, by the West Ardsley Company, have proved most satisfactory, their use being found to CHEAPEN the COST and IMPROVE the average SIZE of the COAL, to LIGHTEN the LABOUR, and also to MODIFY the SANITARY CONDITION of the MINE.

All communications to be made to Messrs. FIRTH, DONISTHORPE, and BOWER, No. 8, Britannia-street, Leeds.

NOTICE.—The WEST ARDSLEY COMPANY, having reason to believe that their patents are being infringed upon, hereby give notice that they will TAKE LEGAL PROCEEDINGS AGAINST ALL PARTIES who may MAKE FOR SALE, or USE ANY MACHINERY in the construction of which any such INFRINGEMENT is MADE.

DYNAMITE, OR NOBEL'S PATENT SAFETY BLASTING POWDER,
May now be had from
MESSRS. WEBB AND CO., CARNARVON,
Sole consignees from the patentee.

This powerful BLASTING AGENT will not explode from a spark, or concussion alone, but requires the combined effect of both, and is fired by a strong percussion cap and ordinary fuse. In a compressed state it may be fired in damp holes, or under water.

Force, SEVEN TIMES that of the BEST GUNPOWDER.

It will shiver to pieces cast or wrought-iron, or the toughest teak timber. No tamping is required. It is by far the safest explosive for blasting purposes ever discovered.

NITRO-GLYCERINE, OR NOBEL'S PATENT BLASTING OIL.

THE EXPLOSIVE FORCE of this BLASTING OIL is TEN TIMES that of GUNPOWDER, and the ECONOMY and SAVING in TIME, LABOUR, and COST in removing granite and hard rock, in sinking shafts, driving tunnels, and opening forward in close ends is immense.

It will not explode from a spark or fire, but from concussion alone, and is consequently much less dangerous than gunpowder or gun-cotton.

Being heavier than water it sinks to the bottom of a wet hole, no other tamping than water being required.

One charge of this blasting oil, which is now being used with wonderful effect in all the largest slate quarries in North Wales, will displace as much slate rock as four or five charges of gunpowder; and its great force, acting on a large quantity of good slate rock, shakes and displaces it at the natural joints, or cracks, without damaging the slabs nearly so much as the more numerous blasts from any other blasting material would do.

This invaluable quarrying agent may now be obtained from Messrs. Webb and Co., Carnarvon, sole consignees from the patentee.

GALLOWAY BOILER TUBES.

NO CORNISH or LANCASHIRE BOILERS should now be MADE without having the FLUES STRENGTHENED by means of these TUBES. They effect a considerable saving in fuel, increase the quantity of steam, and also improve the circulation, thus preventing priming, &c.

W. AND J. GALLOWAY AND SONS, ENGINEERS, MANCHESTER.

GALLOWAY BOILER TUBES

ARE ESPECIALLY ADAPTED for INTRODUCTION into EXISTING BOILERS. Upwards of 40,000 of these TUBES are now working. Full particulars of names of firms who have them at work may be had from the Patentees—

W. AND J. GALLOWAY AND SONS, ENGINEERS, MANCHESTER.

GREEN SLATES.

GREEN SLATES OF ANY SIZE, and of the CHOICEST COLOUR and QUALITY, can now be OBTAINED from the DOROTHEA WEST SLATE COMPANY (LIMITED), CARNARVON.

The "CHARING CROSS HOTEL," "STAR AND GARTER HOTEL" (Richmond) 'LONDON-BRIDGE HOTEL," and many other public buildings, are covered with these elegant slates.

Orders will be executed in regular succession.

Apply to Mr. THOMAS HARVEY, General Manager, 9, Segontium-terrace, Carnarvon, or 33, King-street, Cheapside, London.

Swan Rope Works.

GARNOCK BIBBY, AND CO.,
CHAPEL STREET, LIVERPOOL,

MANUFACTURERS of FLAT and ROUND HEMP and IRON and STEEL WIRE ROPES for MINING, RAILWAY, and SHIPPING PURPOSES.

MANILLA ROPE of SUPERIOR QUALITY, FIFTY PER CENT. STRONGER and THIRTY PER CENT. CHEAPER than Russian hemp rope.

WIRE ROPE of FIRST QUALITY WIRE, and the HIGHEST STANDARD of STRENGTH.

HEATON'S PATENT STEEL.

THE LANGLEY MILL STEEL & IRONWORKS COMPANY
(LIMITED),

LANGLEY MILL, NEAR NOTTINGHAM,

Are now making this Steel according to Mr. HEATON'S PATENTS, dated 17th March, 1866, and 3d May, 1867, under the direct superintendence of the Patentee.

It has been tested in a great variety of ways, and is found to be at least equal to any that can be met with. It is uniform in quality, and is suitable for any purpose to which high-class steel can be applied.

Samples and prices can be obtained on application to the company; or to any of their recognised agents.

TO MINING COMPANIES, MECHANICAL ENGINEERS, MERCHANTS, SHIPPING AGENTS, &c.

THE TITANIC STEEL AND IRON COMPANY,
(LIMITED)

MANUFACTURE A VERY SUPERIOR QUALITY OF STEEL FOR

BORERS, ROCK-DRILLING, AND MINING PURPOSES
GENERALLY; ALSO FOR

LATHE TOOLS, TAPS, DIES, DRILLS, PUNCHES, CHISELS, SHEAR BLADES, SNAPS, AND BOILER MAKERS' AND SMITHS' TOOLS.

SOLID CAST-STEEL HAMMERS
CAREFULLY MADE OF BEST CAST-STEEL TO ANY PATTERN.

The Company's STEEL is manufactured according to the processes and under the supervision of

MR. ROBERT MUSHET.

WORKS,—COLEFORD, FOREST OF DEAN. OFFICES,—No. 15, FOREGATE STREET, WORCESTER.
All communications to be sent to the offices.

ORMEROD, GRIERSON, & CO.,
ST. GEORGE'S IRONWORKS, HULME, MANCHESTER,

Have the largest assortment in the Trade of PATTERNS,

SPUR WHEELS, BEVEL WHEELS, MITRE WHEELS.
ALSO
FLY WHEELS, DRIVING PULLEYS, AND DRUMS
CAN BE SUPPLIED BORED AND TURNED, IF REQUIRED.
CATALOGUES ON APPLICATION.

ALSO, MANUFACTURERS OF BLAST ENGINES, COLLIERY AND ALL OTHER DESCRIPTIONS OF STATIONARY ENGINES AND BOILERS, MILL GEARING, &c.

ARTESIAN BORING.

IMPROVEMENTS IN BORING FOR WATER, COAL, AND MINERAL.
TILLEY'S PATENT.

These consist in DOING AWAY WITH THE MALE SCREW ON BORING RODS, and, by their patent arrangements, DIMINISHING THE RISK OF BREAKAGE, and RENDERING REPAIRS EASY. For prospectuses, apply to—

M. BEALE, 21, GRESHAM STREET, E.C.

Estimates given for obtaining water and boring for minerals.

SPECIAL NOTICE.

CLAYTON, SHUTTLEWORTH, AND CO.,

At the Triennial Trials of the ROYAL AGRICULTURAL SOCIETY OF ENGLAND, held at Bury St. Edmunds, July, 1867, received the following AWARDS:—

For Single Cylinder Portable Steam Engine,—THE FIRST PRIZE OF £25.
For Double Cylinder Portable Steam Engine,—THE FIRST PRIZE OF £25.
For Horizontal Cylinder Fixed Engine,—THE FIRST PRIZE OF £20.
For Double Blast Finishing Thrashing Machine,—THE PRIZE OF £15.
Also, THE SOCIETY'S SILVER MEDAL for Adjusting Blocks for Machines;
PARIS EXHIBITION, 1867, GOLD MEDAL.

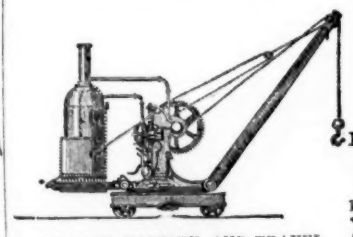
The duty performed by all CLAYTON, SHUTTLEWORTH, and Co.'s Engines on this occasion considerably exceeded that of any others, and has never been equalled at ANY of the trials of the Society. CLAYTON, SHUTTLEWORTH, and Co. refer with pleasure to the fact that the duty of their "Commercial" or single valve engine at Chester, so long ago as 1858, was not equalled by any "ordinary" Engine at Bury.

CLAYTON, SHUTTLEWORTH, & CO., LINCOLN; and 78, LOMBARD STREET, LONDON.

PATENT FLEXIBLE TUBING,
AND BRATTICE CLOTH FOR MINES
MANUFACTURED BY

ELLIS LEVER,
WEST GORTON WORKS, MANCHESTER.

PATENT STEAM CRANE.



TO LIFT, RADIATE, AND TRAVEL BY STEAM.

PARIS EXHIBITION, 1867—AWARDS, } Silver Medal for STEAM CRANES. Bronze Medal for DONKEY FEED PUMPS.

APPLEBY BROTHERS,
EMERSON STREET, SOUTHWARK,
LONDON, S.E.,

Engineers and Patentees of STEAM CRANES, DONKEY PUMPS, &c.

PATENT DONKEY PUMPS.

Ram	1¼ in.	2 in.	2¼ in.	2½ in.	2¾ in.	3 in.	3¼ in.	3½ in.	4 in.
*Gall. per hour	230	400	680	850	1200	1500	2100	2500	3800
Approx. H.P.	15	25	40	50	80	95	130	150	230
Price	£10 5	£12 10	£15	£18	£21	£24	£ 28	£30	£35

* Calculated at 200 strokes per minute.

IMMENSE SAVING OF LABOUR.

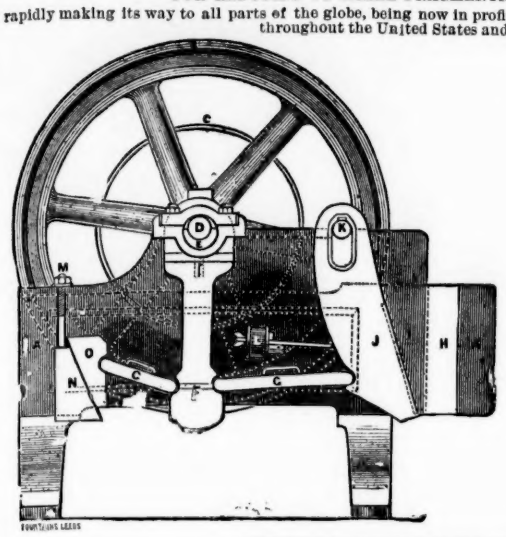
TO MINERS, IRONMASTERS, MANUFACTURING CHEMISTS, RAILWAY COMPANIES, EMERY AND FLINT GRINDERS, McADAM ROAD MAKERS, &c., &c.

BLAKE'S PATENT STONE BREAKER,

OR ORE CRUSHING MACHINE,

FOR REDUCING TO SMALL FRAGMENTS ROCKS, ORES, AND MINERALS OF EVERY KIND.

It is rapidly making its way to all parts of the globe, being now in profitable use in California, Washoe, Lake Superior, Australia, Cuba, Chili, Brazil, and throughout the United States and England. Read extracts of testimonials:—



The Parys Mines Company, Parys Mines, near Bangor, June 6.—We have had one of your stone breakers in use during the last twelve months, and Captain Morcom reports most favourably as to its capabilities of crushing the materials to the required size, and its great economy in doing away with manual labour.
For the Parys Mining Company, JAMES WILLIAMS.
H. R. Marsden, Esq.

Ecton Emery Works, Manchester.—We have used Blake's patent stone breaker made by you, for the last 12 months, crushing emery, &c., and it has given every satisfaction. Some time after starting the machine a piece of the moveable jaws about 20 lbs. weight, chilled cast-iron, broke off, and was crushed in the jaws of the machine to the size fixed for crushing the emery.
H. R. Marsden, Esq. —— THOS. GOLDSWORTHY & SONS.

Alkali Works, near Wednesbury.—I at first thought the outlay too much for so simple an article, but now think it money well spent. WILLIAM HUNT.

Welsh Gold Mining Company, Dolgelly,—The stone breaker does its work admirably, crushing the hardest stones and quartz. WM. DANIEL.

Our 15 by 7 in. machine has broken 4 tons of hard whinstone in 20 minutes, for fine road metal, free from dust. Messrs. ORD and MADDISON,
Stone and Lime Merchants, Darlington.

Kirkless Hall, near Wigan.—Each of my machines breaks from 100 to 120 tons of limestone or ore per day (10 hours), at a saving of 4d. per ton.
JOHN LANCASTER.

Ovoca, Ireland.—My crusher does its work most satisfactorily. It will break 10 tons of the hardest copper ore stone per hour. WM. G. ROBERTS.

General Frémont's Mines, California.—The 15 by 7 in. machine effects a saving of the labour of about 30 men, or $75 per day. The high estimation in which we hold your invention is shown by the fact that Mr. Park has just ordered third machine for this estate. SILAS WILLIAMS.

For circulars and testimonials, apply to—

H. R. MARSDEN, SOHO FOUNDRY,

MEADOW LANE, LEEDS,

ONLY MAKER IN THE UNITED KINGDOM.

CAUTION!

BLAKE'S PATENT STONE BREAKER,

In Chancery.

BLAKE v. ARCHER, NOVEMBER 12, 1867.

His Honour the Vice-Chancellor WOOD having found a VERDICT in FAVOUR of the PLAINTIFFS in the above Cause, establishing the VALIDITY of BLAKE'S PATENT, and made a DECREE for an INJUNCTION to RESTRAIN the DEFENDANTS, Messrs. THOMAS ARCHER and SON, of Dunston Engine-Works, near Gateshead-on-Tyne, from INFRINGING such PATENT, and ordering them to pay to the Plaintiffs the costs of the Suit.

ALL PERSONS are hereby CAUTIONED against MANUFACTURING, SELLING, or USING any STONE BREAKERS similar to BLAKE'S, which have not been manufactured by the Plaintiffs. Application will forthwith be made to the Court of Chancery for INJUNCTIONS AGAINST ALL PERSONS who may be found INFRINGING BLAKE'S PATENT after this notice.

SOLE MAKER IN ENGLAND,

H. R. MARSDEN, SOHO FOUNDRY, MEADOW LANE, LEEDS.

PARIS EXHIBITION, 1867. SILVER MEDALS, CLASSES 40—51.

AWARDED THE ONLY FIRST-CLASS MEDAL FOR CRUCIBLES.

THE

PATENT PLUMBAGO CRUCIBLE COMPANY,

SOLE MANUFACTURERS UNDER MORGAN'S PATENT,

BATTERSEA WORKS, LONDON, S.W.

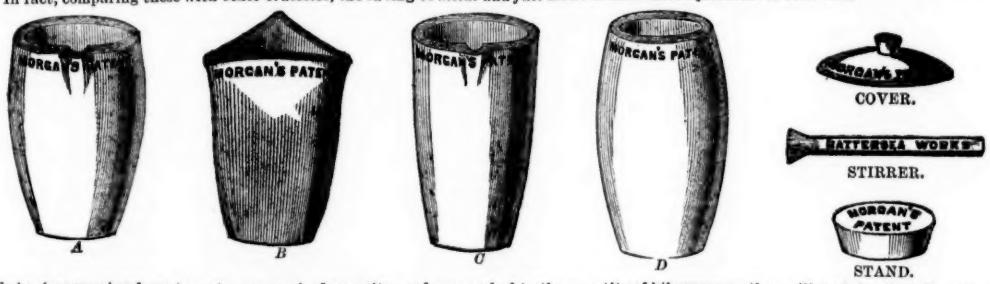
These Crucibles (MORGAN'S PATENT) *were the only ones to which Prize Medals were awarded in London*, 1862; *Dublin* 1865; *New Zealand*, 1865; *and Oporto*, 1865.

They have been in use for many years in the English, Colonial, French, and other Foreign Mints; the English, French, and other Arsenals; and have been adopted by most of the large Engineers, Founders, and Refiners at Home and Abroad.

The capabilities which have now for more than twelve years distinguished these Crucibles are:—

Their quality is uniform. They withstand the greatest heat without danger. Their average durability for Gold, Silver, Copper, and other ordinary metals is forty to fifty pourings, in some cases reaching one hundred. They never crack, and heat more rapidly than any other kind. One annealing only is required. Change of temperature has no effect. They can when hot from the furnace be dipped in cold water with safety. The saving of labour and metal is very great. (Messrs. BREEDEN and BOOTH, Birmingham, testify to the saving of 1 ton 2 qrs. 21 lbs. 4 ozs. of metal in melting 73 tons 6 cwts. of brass.) In *Steel Melting* the saving of fuel has been denomstrated to amount to a ton and a half to every ton of steel fused. For *Zinc* they last longer than iron pots, and save the great loss which arises from mixture with iron. Those for *Malleable Cast-iron* show an average working of seven days, doing each day nearly double the work of any other crucible.

As these crucibles last much longer than any others, it follows that the saving of metal must be great, because to each worn crucible a quantity of metal adheres. In fact, comparing these with other crucibles, the saving of *metal* and *fuel* alone is more than equivalent to *their cost*.



A are made in sizes varying from 2 ozs. to any required capacity, and are marked by the quantity of kilogrammes they will contain; thus No. 100 will contain 100 kilogrammes.
B differ in shape, but correspond in all other respects with *A*, and are similarly marked.
C are marked in English pounds—thus, a crucible marked 60 will contain 60 lbs.
D are made expressly for steel in various sizes.

MORGAN'S PATENT CRUCIBLES

Can be made any shape or size required, and are stamped as below:—

Having secured new Patents for our Manufacture, and to prevent fraudulent Imitations,

we call particular attention to our Trade Mark, as here shown.

"It follows, with the persistence of a law, that originators should be beset by imitators, just as in the natural world the finest organic forms are most liable to parasitical growth."—Miss METEYARD'S *Life of Josiah Wedgewood, the Potter.*

In all instances please specify "MORGAN'S PATENT," and address to—

BATTERSEA WORKS, LONDON, S.W.

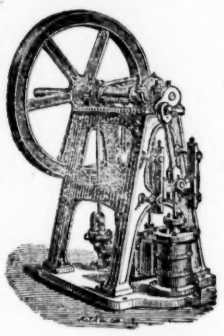
Complete Illustrated List forwarded on application.

BICKFORD'S PATENT SAFETY FUSE

Obtained the PRIZE MEDALS at the "ROYAL EXHIBITION" of 1851; at the "INTERNATIONAL EXHIBITION" of 1862, in London; at the "IMPERIAL EXPOSITION" held in Paris, in 1855; at the "INTERNATIONAL EXHIBITION," in Dublin, 1865; and at the "UNIVERSAL EXPOSITION," in Paris, 1867.

BICKFORD, SMITH, AND CO., of TUCKINGMILL, CORNWALL, MANUFACTURERS of PATENT SAFETY-FUSE, having been informed that the name of their firm has been attached to fuse not of their manufacture, beg to call the attention of the trade and public to the following announcement:—

EVERY COIL of FUSE MANUFACTURED by them has TWO SEPARATE THREADS PASSING THROUGH the COLUMN of GUNPOWDER, and BICKFORD, SMITH, AND CO. CLAIM SUCH TWO SEPARATE THREADS as THEIR TRADE MARK.



STEAM ENGINES,

ENGINEERS' TOOLS, BUILDERS', CONTRACTORS',

COLLIERY PLANT, and MACHINERY

Of every description, new and secondhand, FOR SALE OR HIRE,

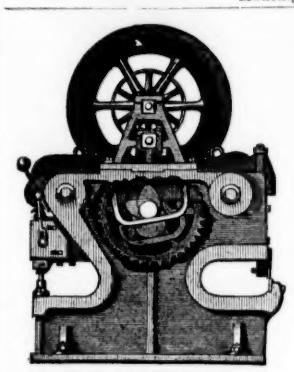
At greatly reduced prices. Best materials, workmanship, and finish, warranted.

WHEATLEY KIRK,

ENGINEERING, MILL VALUER, AUCTIONEER, &c.,

8, ESSEX STREET, MANCHESTER.

Monthly Circulars forwarded free of charge.

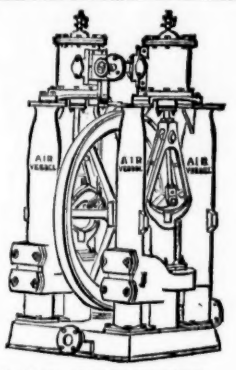


JOHN CAMERON'S

PATENT DOUBLE CAM LEVER PUNCHING and SHEARING MACHINE,

1¼ × 1¼ in. × 24 in.=8 tons, £185.

WORKS,
EGERTON STREET, HULME, MANCHESTER.



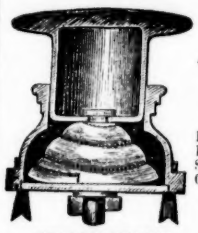
JOHN CAMERON'S STEAM PUMPS,

From 2 to 12 in. diameter,

SINGLE AND DOUBLE-ACTING.

WORKS,
EGERTON STREET, HULME, MANCHESTER.

THOMAS TURTON AND SONS,



MANUFACTURERS OF

CAST STEEL for PUNCHES, TAPS, and DIES, TURNING TOOLS, CHISELS, &c.

CAST STEEL PISTON RODS, CRANK PINS, CONNECTING RODS, STRAIGHT and CRANK AXLES, SHAFTS and FORGINGS of EVERY DESCRIPTION.

DOUBLE SHEAR STEEL, BLISTER STEEL, SPRING STEEL, GERMAN STEEL,

FILES MARKED T. TURTON EDGE TOOLS MARKED WM. GREAVES & SON.

Locomotive Engine, Railway Carriage and Wagon Springs and Buffers.

SHEAF WORKS AND SPRING WORKS, SHEFFIELD.
LONDON WAREHOUSE, 35, QUEEN STREET, CANNON STREET, CITY, E.C.
Where the largest stock of steel, files, tools, &c., may be selected from.

JOHN AND EDWIN WRIGHT,

PATENTEES.

(ESTABLISHED 1770.)

MANUFACTURERS OF EVERY DESCRIPTION OF IMPROVED

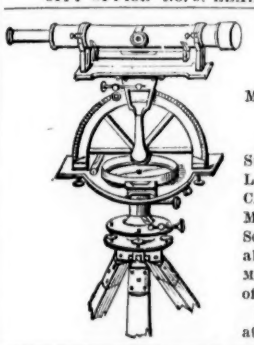
PATENT FLAT AND ROUND WIRE ROPES,

From the very best quality of charcoal iron and steel wire.

PATENT FLAT AND ROUND HEMP ROPES.

SHIPS' RIGGING, SIGNAL AND FENCING STRAND, LIGHTNING CONDUCTORS, STEAM PLOUGH ROPES (made from Webster and Horsfall's patent steel wire), HEMP, FLAX, ENGINE YARN, COTTON WASTE, TARPAULING, OIL SHEETS, BRATTICE CLOTHS, &c.

UNIVERSE WORKS, MILLWALL, POPLAR, LONDON.
UNIVERSE WORKS, GARRISON STREET, BIRMINGHAM
CITY OFFICE No. 5, LEADENHALL STREET, LONDON, E.C.



A. JEFFERY

(Eight years with the late Mr. WILTON, St. Day),

MATHEMATICAL INSTRUMENT MAKER,

CAMBORNE, CORNWALL,

Supplies MINERS' DIALS, CIRCUMFERENTERS, LEVELS, CIRCULAR and PLAIN PROTRACTORS, CASES OF DRAWING INSTRUMENTS, SCALES, MEASURING CHAINS AND TAPES, ASSAYERS' SCALES and WEIGHTS, ENGINE COUNTERS, and all kinds of SURVEYING and MAPPING INSTRUMENTS of the most improved constructions, and of guaranteed accuracy, at moderate prices.

Repairing in the above branches promptly attended to.

NERVOUS DEBILITY: ITS CAUSE AND CURE.—Before seeking aid from the so-called remedies without medicine, read this valuable work on the Treatment and Cure of Nervous and Physical Debility, Loss of Appetite, Pains in the Back, Spermatorrhœa, &c., with Plain Directions for Perfect Restoration to Health. Sent post free to any address, on receipt of two postage stamps. Letters of enquiry or details of case promptly answered.
Address, Dr. SMITH, 8, Burton-crescent, London, W.C.

DR. WATSON (of the Lock Hospital), F.R.A.S., Member of the College of Physicians and Surgeons, on the SELF-CURE of NERVOUS and PHYSICAL DEBILITY, Lowness of Spirits, Loss of Appetite, Timidity, Incapacity for Exertion, &c., with means for perfect restoration. Sent free for two stamps by Dr. WATSON, No. 1, South-crescent, Bedford-square, London. Consultations daily from 11 till 3, and 6 till 8; Sundays, 10 till 1.

Just published, post free for two stamps,

WONDERFUL MEDICAL DISCOVERY, demonstrating the true causes of Nervous, Mental, and Physical Debility, Lowness of Spirits, Indigestion, Want of Energy, Premature Decline, with plain directions for perfect restoration to health and vigour, WITHOUT MEDICINE. Sent free on receipt of two stamps, by W. HILL, Esq., M.A., Berkeley House, South-crescent, Russell-square, London, W.C.

CONSULT DR. HAMMOND (of the LOCK HOSPITAL, &c.), No. 11, Charlotte-street, Bedford-square, London, W.C., in all those ailments which tend to embitter and shorten life, and especially those termed PECULIAR and CONFIDENTIAL. At home, Nine to Two, and Three to Eight; Sundays, Ten to Twelve. The "Self-Curative Guide" post free, two stamps.
N.B. Cases of recent infection cured in two days.

ELECTRICITY IS LIFE.

CURE YOURSELF BY THE PATENT SELF-ADJUSTING CURATIVE AND ELECTRIC BELT.—Sufferers from spermatorrhœa nervous debility, painful dreams, &c., can now cure themselves by the only guaranteed remedy in Europe, protected by Her Majesty's great seal. Free for one stamp by H. JAMES, Esq., Percy House, Bedford-square, London.
N.B.—Medicine and fees superseded.
Reference to the leading Physicians of the day.

MR. JAMES HUME, 74, OLD BROAD STREET, LONDON.
Orders to BUY and SELL executed at a margin of 1¼ per cent.
Cash remitted on receipt of transfer.
Every description of mining share and Stock Exchange securites negociated.
PRINCE OF WALES.—Holders of these shares may buy other rising stocks through Mr. HUME without any outlay of cash, and thus secure profit on the one without disposing of the other.
Mr. J. HUME'S Circular will be sent on application.

MR. EMANUEL BEAZLEY begs to notify that he will CONTINUE the BUSINESS of STOCK AND SHAREDEALER, as lately carried on under the name of MESSRS. J. D. GENN AND CO.
Orders promptly executed by post or telegraph.
A daily list of Closing Prices will be forwarded on application.
Mr. BEAZLEY recommends the immediate purchase of Clifford, Prince of Wales, New Lovell, Lovell Consols, West Caradon, West Frances, and Redmoor. Information respecting these and several other mines may be had on application.
Member of the Mining Exchange.

WALTER TREGELLAS, 122, BISHOPSGATE STREET WITHIN, E.C., DEALS in ALL *bona fide* **MINE SHARES**, either for immediate cash or the fortnightly account, at fair market prices.
NORTH WALES LEAD MINES.—Attention is called to the mines of this district; they are cheaply worked, and in many cases very remunerative to the adventurers. I can strongly recommend Westminster: the shares are about par (£5 paid, and no liability); 70 tons of ore were sold at Holywell on Thursday, the produce of one month; this quantity will be increased as the works progress. I am always able to give reliable information on this and the neighbouring mines.
In Brazilian gold mines I am always in a position to do business, having special means of information from residents on the spot.

MESSRS. WILSON, WARD, AND CO.,
STOCK AND SHAREDEALERS,
16, UNION COURT, OLD BROAD STREET, LONDON, E.C.
Special business in Penhale United, New Great Consols, Frontino, and North Treskerby.

MR. D. STICKLAND, M.E., having had upwards of 40 years' mining experience in Cornwall, several years of which he has had the entire management of mines therein, enables him to GIVE GOOD ADVICE thereon.
Mining, Railway, and other Shares bought, sold, or exchanged. Shares for sale in mines and quarries that will pay 15 to 20 per cent. per annum.
Offices, 5, Finsbury-street, London, E.C.

MR. J. N. MAUGHAN, STOCK AND SHAREBROKER
(Member of the Stock Exchange),
No. 2, COLLINGWOOD STREET, NEWCASTLE-ON-TYNE.
Transacts business in Railways, Funds, and every description of Mines.
Bankers: Messrs. Lambton and Co.

MESSRS. KEANE AND CO.,
MINING AGENTS, AND SHAREDEALERS,
90, CANNON STREET, LONDON, E.C., and
BRIDGEWATER CHAMBERS, BROWN STREET, MANCHESTER.

MANCHESTER, AND WEST END OF LONDON.
MR. W. HANNAM, MINING, SLATE QUARRYING,
INSURANCE, AND GENERAL SHAREBROKER.
ROYAL INSURANCE BUILDINGS, KING STREET MANCHESTER; and 449, STRAND, LONDON, W.
INSTANTANEOUS COMMUNICATION with the STOCK and MINING EXCHANGES, avoiding the delay and annoyance of visiting the City to ascertain prices. A Monthly Investment Circular on application.

ROBERT LIBBY AND SON,
MINE AND SHAREDEALERS, &c.,
CAMBORNE, CORNWALL.

MR. H. D. HOSKOLD,
MINING ENGINEER,
LAND AND MINERAL SURVEYOR
CINDERFORD, NEWNHAM.
Gentlemen requiring reliable and correct information respecting any Coal or Iron Mine Property in the Forest of Dean may obtain it on application.
Surveys, Plans, Reports, and Valuations on the usual moderate terms.

CHONTALES GOLD MINE.—FOR SALE, 120 Royalty shares (£5 fully paid), at £2½ discount.
Apply, by letter, to Mr. JOHN BATTERS, 13, Throgmorton-street, E.C.

THE CAPE COPPER MINING COMPANY (LIMITED).—Notice is hereby given, that at a MEETING of the DIRECTORS held THIS DAY, it was resolved—
That an INTERIM DIVIDEND of TEN SHILLINGS PER SHARE, free of income tax, on account of the estimated profits to the 31st December, 1867, be now declared, payable on the 28th day of February instant, and that the transfer books be closed from the 22d to the 28th instant, both days inclusive.
By order of the Board, J. C. LEAVER, Secretary.
6, Queen-street-place, London, E.C., Feb. 14, 1868.

HEMATITE IRON COMPANY (LIMITED).—The FIRST ORDINARY GENERAL MEETING of the shareholders in this company was HELD at the Registered Offices, 50, Lincoln's Inn-fields, on WEDNESDAY, the 19th instant.
Mr. H. J. PELLEW in the chair.
The balance-sheet for the past year was approved and adopted, and the retiring directors re-elected.
The proceedings terminated with a vote of thanks to the Chairman.

THE CWT-Y-BUGAIL SLATE COMPANY (LIMITED).—Notice is hereby given, that an ORDINARY GENERAL MEETING of the Cwt-y-Bugail Slate Company (Limited) will be HELD at 10A, King's Arms-yard, Moorgate-street, London, on WEDNESDAY, the 26th day of February inst., at One o'clock, for the dispatch of general business. And that a SPECIAL or EXTRAORDINARY MEETING of the said company will be HELD at the same place, on the same day, and at the hour of Two o'clock, at which the following special business is proposed to be transacted—viz.:
"To sanction, by special resolution of the company (in accordance with Rule 34 of the company's Articles of Association, dated the 8th day of December, 1863), the issue by the directors of new shares of such amount as shall then be determined on, so as to raise the further sum of £20,000, making the company's entire capital of £50,000."
"To determine all such other matters and things (if any) as shall be deemed to be necessary or expedient in accordance with the said Articles for raising such further capital, and in connection with the proposed issue of new shares."
Bangor, 10th February, 1868. J. HAYWOOD, Managing Director.

THE MINERA RAGMAN MINING COMPANY (LIMITED).—Notice is hereby given that a SPECIAL GENERAL MEETING of the shareholders of the Minera Ragman Mining Company (Limited) will be HELD at the Brownlow Arms Hotel, Clitheroe, in the county of Lancaster, on THURSDAY, the 26th day of March, 1868, at Eleven o'clock in the forenoon, for the purpose of taking into consideration the advisability of dissolving the company and winding the same up voluntarily under the provisions of the Companies Act, 1862, and to appoint a liquidator.
By order of the Board of Directors,
THOMAS HUGHES, Secretary.
3, Temple-row, Wrexham, 17th February, 1868.

TO CAPITALISTS SEEKING A FIRST-CLASS INVESTMENT.
£5 per cent. per annum, free of income tax, with a prospective increase to £7 per cent. per annum.
CAPITAL, £1,750,000, AND UPWARDS.

THE HULL DOCK COMPANY,
Incorporated by Act of Parliament, 1774,

Sole proprietors of the Docks at Hull, the third port in the kingdom, are now issuing the remainder of the share capital authorised by recent Acts of Parliament. These shares are guaranteed to pay a dividend of £5 per cent., free of income tax, until one year after the opening of the Western Dock, and are limited to pay a maximum dividend of £7 per cent. in terms of the Company's Act of 1861. The new shares rank equally with the existing shares of the company, and there are no preference shares. The tonnage of the port is rapidly increasing, and in the year 1866 amounted to 1,343,819 tons.
The Dock Estate consists of the six docks at Hull, with large and commodious warehouses, offices, &c., adjacent to the docks, and the company possess large unincumbered house and other property, which, in addition to the rates and dues payable to the company, produce upwards of £14,000 a year. The reserve fund of the company available against contingencies is upwards of £65,000. The Western Dock, now in course of construction, is expected to be completed in the year 1868. The North-Eastern Railway Company hold £50,000 of the share capital of the company, and the Trinity House of Hull £30,000. The Lancashire and Yorkshire Railway Company are seeking parliamentary powers in the session 1867-8 to enable them to subscribe to the shares of the Dock Company. The loan capital has been raised at rates averaging under £4 12s. per cent. The shares are £50 shares, the calls on which may be made by periodical payments extending over several years, or in one or more sums, at the option of subscribers.
Applications for shares and for detailed particulars of the financial position of the company may be made to G. W. DUMBELL, Secretary.
Dock Office, Hull, November 18, 1867.

CONSULTING RAILWAY AND MINING ENGINEER,—MR. TREDINNICK, CROWN CHAMBERS, THREADNEEDLE STREET, LONDON (Office of Registry of British and Foreign Mines). Vendors introduced to purchasers upon terms as may be agreed. Registration fee, 21s.
Plans and sections, with reports, carefully preserved, and open to inspection for a fee of 5s.
Railways and Mines should be selected with great caution, and those who hold will do well earnestly to look into the character and merits of those they now possess. The uninitiated should approach these securities only through the aid of practical authorities. Mr. TREDINNICK can be confidently consulted, either personally or by letter, for a fee of 21s., and the services of efficient and practical brokers introduced, if required.

THE MINING SHARE LIST.

BRITISH DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
1500	Alderley Edge, c, Cheshire*	10 0 0	—		9 7 8	0 5 0	Jan. 1868
200	Botallack, t, c, St. Just	91 5 0	—		488 15 0	5 0 0	May 1866
4000	Brookwood, c, Buckfastleigh	1 11 0	—		0 7 6	0 2 6	Dec. 1867
1000	Bronfloyd, l, Cardigan*	12 0 0	—		9 3 0	0 6 0	Jan. 1868
6400	Cashwell, l, Cumberland*	2 10 0	—		0 1 6	0 1 6	Aug. 1866
916	Cargoll, s-l, Newlyn	15 5 7	—		14 5 0	0 10 0	Jan. 1868
509	Creegbrawse and Penkevil, t	—	—		1 0 0	1 0 0	Oct. 1867
867	Cwm Erfin, l, Cardiganshire*	7 10 0	—		25 18 0	1 0 0	Jan. 1868
128	Cwmystwith, l, Cardiganshire	60 0 0	—		381 10 0	2 0 0	Dec. 1867
280	Derwent Mines, s-l, Durham	300 0 0	—		174 10 0	5 0 0	June 1867
1024	Devon Gt. Consols, c, Tavistock†	1 0 0	440		1088 0 0	7 0 0	Jan. 1868
656	Ding Dong, t, Gulval‡	49 14 6	—		0 10 0	0 10 0	Sept. 1867
358	Dolcoath, c, t, Camborne	128 17 6	—		840 10 0	3 0 0	Feb. 1868
6144	East Caradon, c, St. Cleer†	2 14 6	5⅛	4½ 5	14 11 6	0 2 0	July 1867
300	East Darren, l, Cardiganshire	32 0 0	—		150 10 0	2 0 0	Dec. 1867
128	East Pool, t, c, Pool, Illogan	24 5 0	—		422 10 0	5 0 0	Jan. 1868
1906	East Wheal Lovell, t, Wendron	3 9 0	8¾	8¼ 8¾	3 11 6	0 10 0	Dec. 1867
2800	Foxdale, l, Isle of Man*	25 0 0	—		71 0 0	0 10 0	Sept. 1867
5000	Frank Mills, l, Christow	3 18 6	—		3 5 6	0 5 0	Feb. 1866
3950	Gawton, c, Tavistock	3 10 6	—		0 3 0	0 3 0	Jan. 1868
15000	Great Laxey, l, Isle of Man*	4 0 0	18½	17½ 18½	7 15 0	0 10 0	Dec. 1867
5908	Great Wheal Vor, t, c, Helston†	40 0 0	20	19 20	12 8 0	0 7 6	Dec. 1867
1024	Herodsfoot, l, near Liskeard†	8 10 0	40	38 40	43 10 0	1 10 0	Oct. 1867
6000	Hingston Down, c, Calstock†	5 10 6	—		0 10 0	0 5 0	April 1866
400	Lisburne, l, Cardiganshire	18 15 0	—		498 10 0	3 0 0	Dec. 1867
3000	Maes-y-Safn, l, Flint*	20 0 0	29	28 29	3 0 0	1 0 0	Dec. 1867
9000	Marke Valley, c, Caradon	4 10 6	6⅝	6⅜ 6⅝	4 4 6	0 3 6	Jan. 1868
3000	Minera Boundary, l, Wrexham*	1 0 0	—		0 13 0	0 3 0	Mar. 1866
1800	Minera Mining Co. l, Wrexham*	25 0 0	200	180 200	223 13 0	4 15 0	Nov. 1867
20000	Mining Co. of Ireland, c, l, cl.	7 0 0	—	18⅜ 18½	—	0 5 7	Jan. 1867
40000	Mwyndy Iron Ore*†	3 5 0	—		0 6 6	0 2 6	Mar. 1866
200	Parys Mines, c, Anglesey*	50 0 0	—		157 10 0	5 0 0	Jan. 1866
12800	Prince of Wales, t, Calstock	0 12 6	3	56s. 58s.	0 3 6	0 1 0	Nov. 1867
6000	Prosper United, t, c, St. Hilary	8 14 0	—		0 5 0	0 5 0	Feb. 1867
1120	Providence, t, Uny Lelant†	10 6 7	28	27 28	84 2 6	0 15 0	Nov. 1867
512	South Caradon, c, St. Cleer†	1 5 0	—		574 10 0	6 0 0	Jan. 1868
6000	South Darren, l, Cardigan*	3 6 6	1¾	1¼ 1¾	0 8 6	0 1 6	Oct. 1867
496	So. Wh. Frances, c, Illog.†‡	18 18 9	23	23 25	373 13 6	1 0 0	Jan. 1868
508	Summer Hill, l, Mold	3 13 6	—		2 5 6	0 5 0	Feb. 1868
6000	Tincroft, c, t, Pool, Illogan†	9 0 0	15	13 14½	19 1 0	0 5 0	Nov. 1867
2000	Trumpet Cons., t, Helston	11 10 0	—		12 0 0	0 7 6	Dec. 1867
3000	W. Chiverton, l, Perranzabuloe†	10 0 0	68	65 67½	23 7 6	2 0 0	Nov. 1867
5000	West Godolphin, t, c, Breage	0 1 0	—		0 2 0	0 2 0	Dec. 1867
400	W. Wheal Seton, c, Camborne†	47 10 0	195	185 190	489 10 0	4 10 0	Feb. 1868
512	Wheal Basset, c, Illogan†	5 2 6	76	70 75	630 10 0	1 10 0	Feb. 1868
1024	Wheal Friendship, c, Tavistock	20 0 0	—		300 10 0	0 10 0	Nov. 1866
512	Wheal Jane, s-l, Kea	10 10 0	—		—	2 0 0	Jan. 1868
4295	Wheal Kitty, t, St. Agnes	5 4 6	—		3 5 0	0 2 0	Feb. 1868
1024	Wheal Mary Ann, l, Menheniot†	8 0 0	21½	20½ 21½	63 7 6	0 17 6	Dec. 1867
2000	Wheal Rose, c, Scorrier	—	—		1 0 0	0 10 0	Feb. 1866
396	Wheal Seton, t, c, Camborne	58 10 0	90	80 85	254 15 0	2 0 0	Feb. 1868
3000	Whitewell Lead, Clitheroe*	0 5 0	—		1 0 0	0 10 0	Dec. 1867
17000	Wicklow, c, t, Wicklow	2 10 0	—		48 10 0	0 15 0	Oct. 1867

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Business.	Total divs.	Per share.	Last paid.
35000	Alamillos, l, Spain*†	2 0 0	—		0 1 0	0 1 0	Oct. 1867
20000	Australian, c, South Australia†‡	7 7 6	—		0 1 0	0 1 0	Aug. 1867
15000	Cape Copper Mining*†	7 0 0	9½	9⅜ 9½	3 2 6	0 10 0	Feb. 1868
76000	Don Pedro North del Rey*†‡	0 14 0	3¼	2½ 2¾	0 10 9	0 3 0	Nov. 1867
70000	English and Australian, c‡	2 10 0	⅞	⅝ ⅞	—	0 1 0	Feb. 1868
25000	Fortuna, l, Spain*†	2 0 0	—		1 7 4	0 2 0	Oct. 1867
20000	Gen. Mining Assoc., Nova Scotia†	20 0 0	13½		23 10 0	0 15 0	June 1867
10000	Gonnesa, l,* [5000 £5 pd., 5000 £4 pd.]		—		10 per cent.		July 1867
68000	Kapunda Mining Co., Austra†‡	1 0 0	⅜	⅜ ½	0 0 10	0 0 10	Nov. 1867
15000	Linares, t, Spain*†	3 0 0	1¾		11 8 4	0 2 0	Oct. 1867
50000	Panulcillo, c, Chili*†	3 0 0	1½		10 per cent.		Yearly.
6000	Peel River Land and Mineral*†	100 0 0			—	—	
100000	Pontgibaud, s-l, France†	20 0 0	—		4 14 3	0 11 0	June 1867
10000	Port Phillip, g, Clunes†	1 0 0	1⅛	1⅜ 1½	1 0 0	0 1 6	Jan. 1868
20000	Scottish Australian Min. Co.†	1 0 0	1⅛	1 1⅛	7½ per cent.		Nov. 1867
11000	St. John del Rey, Brazil*†	15 0 0	21⅛	15 17	81 10 0	4 5 0	Dec. 1867
50000	Victoria (London) [25000 £1 pd., 25000 12s. 6d. pd.]				0 9 0	0 1 0	Jan. 1866
40000	West Canada Mining Co.*	1 0 0	—		0 19 6	0 2 6	May 1866

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
50000	Anglo-Argentine, s, Argentine Republic*	1 0 0	1½	1¼ 1½	
100000	Anglo-Brazilian, g*†	0 10 0	⅝	½ ⅝	Nov. 1866
12500	Anglo-Italian, g*†	0 10 0	—	½ ¾	Jan. 1868
2464	Burra Burra, c, South Australia‡	5 0 0	30		
25000	Capula, s, Mexico*†	1 12 0	—		Aug. 1866
30000	Chontales, g, s, Nicaragua*†	4 10 0	4¾	3 3¼	Nov. 1867
12000	Cobre Copper Company, c, Cuba†‡*	45 10 0	—		Jan. 1868
10000	Copiapo Mining Company, Chili†‡	16 10 0	—		
10000	Copiapo Smelting, Chili*	10 0 0	—		April 1866
300	Copper Miners' Co. of South Australia* [150 £100 pd., 150 £70 pd.]				Nov. 1866
15000	El Chico Silver Mining and Reduction Company*	5 0 0	—		Nov. 1866
40000	Fortune Copper Mining Co. of Western Australia	2 0 0	—		Fully pd.
50000	Frontino and Bolivia, g, New Granada*†	1 15 0	⅞	14s. 16s.	June 1867
10000	Great Barrier Land, Mining, &c., New Zealand	5 0 0	—		Fully pd.
80000	Great Northern, c, South Australia†	1 11 6	—		Sept. 1862
7927	Lusitanian (Portugal)†‡	3 0 0	—		
83090	Mariquita, g, s, New Granada	0 17 6	—		Sept. 1867
12500	Nerbudda Coal and Iron, India*†	6 0 0	—		Dec. 1867
51000	New Quebrada, c, Venezuela*†	3 10 0	—	⅛ ⅜	
15000	Otea, c, New Zealand*	2 0 0	—		Fully pd.
80000	Pestarena United, g, Italy*†	2 12 6	2⅝	2½	
10178	Rhenish Consolidated, l [6000 £5 pd., 4178 £2 10s. pd.]		—		May 1866
100000	Rossa Grande, g, Brazil*†	0 12 0	⅝	12s. 14s.	June 1867
15000	San Pedro del Monte, s, Mexico*	4 0 0	—		Sept. 1866
10000	San Roque, l, Spain	5 0 0	—		Fully pd.
100000	Taquaril, g, Brazil*	0 5 0	—		Oct. 1867
6000	Terreseu, s-l, Isle of Sardinia	2 0 0	—		
43174	United Mexican, s, Mexico†‡	28 5 0	1¾	1¾ 2	
30000	Val Antigoria, g, Italy*	1 2 6	—		
10000	Vancouver, cl*†‡	6 0 0	—		
6000	Val Sassam, s, c, l, Italy*†	7 0 0	—		Aug. 1867
45000	Victor Emanuel, c, Italy*	1 0 0	—		Fully pd.
20000	Washoe, g, Nevada†	5 0 0	—		Fully pd.
80000	Worthing, c, South Australia*†	1 0 0	—		Fully pd.
75000	Yorke Peninsula, South Australia	1 0 0	—		Fully pd.
45000	Yudanamutana, c, South Australia*†‡	3 0 0	1¾	1⅝ 1⅞	Fully pd.

NON-DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.	Last Call.
4000	Bedford United, c, Tavistock*	2 6 8	—		
5000	Bryn Gwiog, l, Flint	0 18 0	—		June 1864
914	Caradon Consols c, St. Cleer	32 13 6	—		Aug. 1867
1000	Carn Brea, c, t, Illogan‡	28 0 0	24½	23 24	May 1867
5000	Carnarvonshire, l, Carnarvon*	4 0 0	7	5 6	Fully pd.
3000	Chiverton, l, Perranzabuloe	9 12 6	3¼	2¾ 3¼	Nov. 1867
3000	Chiverton Moor, l, Perranzabuloe	6 8 6	6	5¾ 6	Aug. 1867
2880	Clifford Amalgamated, c, Gwennap‡	33 17 6	6½	5¾ 6	June 1867
2450	Cook's Kitchen, c, Illogan‡	19 14 9	9¾	9 9½	July 1866
1055	Craddock Moor, c, St. Cleer‡	12 18 0	—		Nov. 1867
12800	Drake Walls, t, Calstock‡	2 5 0	¾	½ ¾	Dec. 1866
512	East Basset, c, Redruth†‡	33 10 0	11	9 11	Nov. 1867
6000	East Carn Brea, c, Redruth‡	3 15 0	2¼	1⅞ 2⅛	
6000	East Grenville, c, Camborne	3 12 6	2	1¾ 2	Nov. 1867
4000	East Wheal Russell, c, Tavistock†	12 15 6	1⅜		Jan. 1868
6144	Gonamena, c, St. Cleer	7 3 6	—		Dec. 1867
5000	Great North Downs, c, Redruth	6 13 0	4¼		Feb. 1867
4800	Great Retallack, s-l, b, Perranzabuloe	2 6 0	3	2½ 2¾	Jan. 1868
5143	Great South Tolgus, c, Redruth	1 4 0	1	16s. 18s.	June 1867
1798	Great Wheal Fortune, t, Breage	30 10 6	—		Nov. 1867
1024	Nangiles, t, c, Kea	29 17 0	—		Feb. 1868
400	New Wheal Seton, c, Camborne	58 10 0	80		Aug. 1867
3457	North Downs, c, Redruth	5 8 10	1¼	1⅛ 1¼	Jan. 1868
695	North Roskear, c, Camborne	56 9 0	—	7	Jan. 1868
5936	North Treskerby, c, St. Agnes	1 9 0	31s.	26s. 28s.	Dec. 1860
5610	North Wheal Crofty, c, Illogan†	3 11 3	2⅞	2¾ 2⅞	July 1866
3000	North Wheal Chiverton, l, Perranzabuloe	4 0 0	5	4½ 5	Mar. 1867
5000	Old Westminster, l, Denbigh	2 0 0	7	5 6	June 1867
8465	Pedu-an-drea, t, Redruth	6 8 6	—		Nov. 1867
1024	Rose and Chiverton United, l, Newlyn	5 0 0	6½		Nov. 1867
6138	South Condurrow, t, c, Camborne	4 0 6	⅝	8s. 10s.	Feb. 1868
940	St. Ives Consols, t, St. Ives‡	10 15 0	—	6s. 7s.	Nov. 1867
920	Stray Park, c, t, Camborne†‡	44 13 8	3½	3 3¼	Jan. 1868
6000	Tamar Valley, s-l, Beeralston	0 5 0	—	14s. 15s.	Nov. 1866
548	Trelyon Consols, t, St. Ives	16 0 0	—		Dec. 1866
6000	West Basset, c, Illogan†‡	1 15 0	2½		Mar. 1867
1024	West Caradon, c, St. Cleer‡‡	19 0 0	10½	10 11	Nov. 1866
12800	West Drake Walls, c, Calstock	0 5 0	¾	½ ⅝	Feb. 1868
2582	West Great Work, t, Breage	5 11 0	3½	3 3½	June 1866
6000	Westminster, Flint, l*	5 0 0	5½	5 5¼	Fully pd.
6000	West St. Ives, t, c, St. Ives	0 1 0	—		Oct. 1865
5000	West Wheal Kitty, t, St. Agnes	2 19 6	⅝	⅝ ¾	Dec. 1867
6000	Wheal Agar, c, Illogan	7 11 0	—		Jan. 1867
512	Wheal Buller, c, Redruth†‡	24 0 0	18	17 19	Jan. 1868
849	Wheal Emily Henrietta, c, Illogan	20 0 0	—		Jan. 1868
6000	Wheal Grenville, c, Camborne†	10 5 0	1⅝	26s. 28s.	Sept. 1868
1040	Wheal Trelawny, s-l, Liskeard†	6 17 0	—	6 7	Dec. 1867
5000	Wheal Uny, t, c, Redruth	10 14 6	1⅝	28s. 30s.	Oct. 1867

NON-DIVIDEND MINES.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.
4000	Ballacorkish, I. of Man, l, c*	3 5 0	—	
4000	Bedford Consols, c, Tavistock	2 15 0	—	1 1½
1031	Bedol Aur, l, Holywell	1 17 0	—	
1248	Boscaswell, t, c, St. Just	7 6 0	—	
2500	Bosworthen and Penzance	4 0 0	—	
5000	Bottle Hill, t, Plympton	1 14 6	—	
1200	Bryn Gwyn, l, Mold*‡	9 0 0	—	
6000	Bwadrain Consols, c	3 2 0	—	
5094	Bwlch Consols, s-l, Cardigan	4 0 0	—	
30000	Caldbeck Fells, l, Cumberld.*	1 15 0	—	
1000	Camborne Consols, c	18 10 0	—	
11000	Cape Cornwall, t, c* [8000 £2 10s. pd., 3000 25s. pd.]			
1000	Cardynham China-clay*	3 0 0	—	
6000	Carn Camborne, c, Camorn.	2 4 6	—	
4005	Cardigan Consols*	5 0 0	—	
600	Cardiganshire, l*	17 10 0	—	
20000	Carysfort [3200 £2½ pd., 16800 £1½ pd.]			
2500	Central Minera, l, Wrexham*	3 17 6	—	
16000	Central Snailbeach l*	1 0 0	—	1 1¼
4000	Clara, l, Llywernog	2 18 6	—	
2048	Colquite & Callington U., c	0 10 0	—	
256	Condurrow, c, t, Camborne‡	76 10 0	—	
50000	Connorree, c, sul, Wicklow*	1 0 0	6s.	
988	Copper Hill, c, Redruth‡	12 10 0	—	
12000	Crelake, c, Tavistock	3 12 0	—	
6000	Cuddra, t, St. Austell	5 5 0	—	
25000	Dundalk, Ireland, l*	0 15 0	—	
740	Eaglebrook, l, Talybont*	19 15 0	—	
1000	East Basset and Grylls, t	3 5 0	—	
6000	East Bottle Hill, t	0 10 6	—	⅛ ⅜
4000	East Chiverton, l, Perranz.	2 16 9	—	
4000	E. Gunnislake & S. Bed. c.	10 12 6	2	2⅜
6000	East Laxey, l, Isle of Man	2 15 0	—	
6000	East Neptune, c, Marazion	—	—	
5000	E. Rosewarne, c, t, Gwinear	2 17 0	½	
6000	East Snaefell, l, I. of Man*	2 10 0	1½	1 1¼
5610	East Seton, c, Camborne	0 13 6	—	
1190	E. Wh. Agar, c, St. Cleer	12 17 0	—	
5000	E. Wh. Rose Con., l, Per.*	2 5 0	—	
6000	Ebury Lead Min. Co., Flint*	1 15 0	1½	1¼ 1¾
6000	Fortescue Cons., c, Tavistock	0 12 6	—	
940	Fowey Con., c, Tywardreath‡	5 4 6	—	
1026	Garden, c, Morvah	6 0 3	—	
6000	Gen. Min. Co. for Ireland, c.	5 10 0	—	2¼
40000	Glasgow Caradon c* [30000 £1 pd., 10000 15. pd.]			
5700	Goginan, Cardigan, l	12 10 0	—	
6000	Gothic, s-l, Cardigan*	2 10 0	—	
486	Grambler & St. Aubyn, c†‡	72 0 0	—	
10000	Great Cwmsymlog, s-l*	1 15 0	—	
4096	Great Caradon, c, St. Ive	3 19 0	—	
3000	Gt. Chiverton, s-l, Perranz.*	3 10 0	—	
3000	Gt. East Lovell, t, Helston	2 1 0	—	
5000	Great Mona, l, Isle of Man*	4 0 0	—	
12500	Gt. No. Laxey (Isle of Man)*	0 15 0	—	
1000	Great N. Tolgus, c, Illogan	10 0 0	—	
6000	Gt. S. Chiverton, s-l, Perranz	1 10 6	—	
3313	Gt. Wh. Baddern, t, Devoran	7 17 6	—	
119	Great Work, t, Germoe	100 0 0	—	
10240	Gunnislake (Clitters'), t, c.	4 19 0	—	
6068	Gwydyr Park, l, Llanrwst	1 14 6	—	
6400	Harwood, l, Durham*	0 7 6	—	⅛ ⅜
1000	Hematite Iron Company*	5 0 0	—	
6000	Hennock Iron Company	0 5 0	—	
2500	Laxey Neath Smelting Co.*	2 10 0	—	
1019	Leeds and St. Aubyn, t, c	19 13 4	—	
151	Levant, c, t, St. Just	10 8 1	—	
2325	Lonsdale Iron Co. [650 £5 pd., 1675 £3 pd.]			
5120	Lovell Consols, Wendron, t.	0 3 0	—	
6000	Maudlin, c, Lostwithiel	4 7 0	—	
6000	Mid-Wales, s-l,*	2 4 0	—	
1000	Montgomeryshire, l, b*	2 0 0	—	2 2¼
640	Mount Pleasant, l, Mold	4 0 0	—	
12800	Nether Hearth* [6400 £1 pd., 6400 2s. pd.]			
6000	New Birch Tor & Vitifer, t‡	1 13 6	—	
1500	New Chiverton, l, Perranz.	0 9 6	½	6s. 8s.
6000	New Clifford, c., Gwennap*	2 10 0	—	1½
24000	New Cornish [12000 £1 pd., 12000 15s. pd.]			
6400	N. Crow Hill, l, St. Stephen.	3 5 6	—	
6514	New E. Russell, c, Tavistock	0 12 6	—	
20000	New Gt. Cons., c, Tavistock*	0 15 0	—	
3000	New Huntingdon, t, Devon	0 1 0	1	
6400	New Pembroke, St. Blaz. t, c	1 7 0	—	
6000	New Prosper, t, c, St. Hilary	0 10 0	—	
5755	New Treleigh, c, Redruth	4 8 0	—	
667	New Trevenen, t, Wendron.	12 1 6	—	
4096	New Wh. Lovell, t, Wendron	1 10 0	—	
2000	N. Wh. Towan, c, t, Wendron	1 10 0	—	
16000	N. Devon, s-l, Combmartin	0 19 0	—	
5000	No. Dolcoath, c, Camborne	4 3 0	—	
1361	No. Grambler, c, Redruth	8 5 3	—	
6000	North Jane, t, s-l, Kenwyn	3 1 6	—	
2000	North Levant, t, c, St. Just	10 12 0	7	6½ 7
4000	No. Phœnix, c, Linkinhorne	4 11 0	—	
3933	North Pool, c, Illogan	5 16 0	—	
1024	No. Retallack, c, Perrazabuloe	2 0 0	—	
1935	No. Shepherds, l, Newlyn*	6 10 0	—	
6000	North Wheal Basset, c, t†	5 0 0	—	
6144	N.W. Robert, c, Smp. Spiney	4 8 11	—	
12288	Okel Tor, c, Calstock	2 7 4	—	
8000	Old Gunnislake, c, Calstock	2 15 0	—	
6400	Par Consols, c, St. Blazey†‡	2 14 6	—	
5000	Pendeen Consols, c, St. Just	6 15 0	—	
4000	Penhale United, s-l, Perran.*	0 15 0	—	
2720	Penhale Wh. Vor, t, c, Breage	4 12 6	—	
5000	Penhalls, t, St. Agnes	3 0 0	—	
1772	Polberro, t, St. Agnes	15 0 0	—	
12000	Redmoor, c, t, Callington	1 15 6	—	
6000	Reinnie Laxey, l, I. of Man*.	4 10 0	—	
3000	Rhydtalog, s-l, Cardigan	0 5 0	—	
6000	Roaring Water*	2 15 0	—	
2000	Rosecliff and Tolcarne, l*	9 0 0	—	
3973	Rosewarne Cons., c, Gwinear	5 12 6	—	
5915	Rosewall Hill & Ransom, c.	3 0 0	1½	30s.
3848	Rosewarne Un. c, t, Gwinear	4 3 0	—	
16000	Shropshire Copper, c*	2 10 0	—	
20500	Snaefell, l, Isle of Man*	1 0 0	—	
400	Silver Brook, s-l, Carmar.*	10 0 0	—	
12000	Sortridge Cons., c, Tavistk.†	1 18 6	—	
512	South Basset, c, Gwennap	28 10 0	9	6 8
3000	So. Chiverton, s, l, Perranz.	6 2 6	—	
6000	S. Dolcoath & Carnarth. Con.	2 16 6	—	
6000	So. Fowey, c, Tywardreath	0 10 0	—	
3395	So. Herodsfoot, l, Liskeard	4 4 0	—	
30210	South of Scotland, c*	1 0 0	—	
2739	South Trevenna, c, t	2 10 0	—	
937	So. Wh. Crofty, c, Illogan	24 10 10	16	9 11
6000	South Wheal Grenville, t, c.	1 0 6	—	5s.
400	So. Wh. Seton, c, Camborne	81 3 0	—	
236	Spearne Consols, t, St. Just	4 4 4	—	
242	Spearne Moor, t, St. Just	6 2 0	—	
673	St. Ives Wh. Allen, t, St. Ives	18 18 7	—	
8771	St. Just Amalg., t,* [6000 £3 10s. pd., 2771 £2 5s. pd.]			
300	Steeple Aston Iron Ore Co.	4 0 0	7	
7000	Stiperstones, l, Salop*	5 10 0	—	
3500	Tin Hill, t, St. Austell	1 12 0	—	
501	Tresavean and Trethurrup	16 11 0	—	
4440	Trevenen & Tremenheere	7 11 0	—	
4096	Trewetha, s-l, Menheniot	7 17 0	—	
1943	Treworlis, t, Wendron	11 15 4	—	
4200	Vigra and Clogau, c, Dolg.*‡	5 10 0	—	
2500	West Briton, c, Crowan	1 0 0	—	
1319	West Cwm Erfin, l* [319 £4 paid]		—	
256	West Damsel, c, Gwennap	38 10 0	—	
12000	W. Maria & Fortes., c, Lam.	3 11 6	—	
12800	West Prince of Wales, c	0 10 0	—	9s. 11s.
1000	West Rose Down, c, Linking.	20 5 0	—	
512	West Tolgus, c, Redruth	58 10 0	—	
512	W. Wh. Frances, t, Illogan	105 15 0	35	30 35
4096	W. Wh. Tremayne, c, St. Erth	0 6 0	—	
741	Wheal Basset and Grylls, t.	7 18 6	—	
6000	Wheal Crebor, c, Tavistock	2 6 6	—	1s. 3s.
4000	Wh. Emma, c, Buckfastleigh	3 19 0	—	
6000	Wheal Emily, s, Callington	0 1 0	2½	2 2½
6000	Wheal Ida, s-l, St. Ive	1 5 0	—	
1024	Wh. Kitty, t, Uny Lelant†	3 10 6	—	
896	Wh. Margaret, t, Uny Le.‡	13 17 6	—	
728	Wheal Margery, St. Ives, t, c	26 14 0	—	
6000	Wheal Mary Florence, c*	2 4 0	—	
1000	Wh. Mary Hutchins, c, Plymp.	2 0 6	—	
80	Wheal Owles, t, St. Just‡	70 0 0	—	
6000	Wheal Sparnon, c, Redruth	3 12 0	—	
1920	Wh. Trannack, c, Sithney	1 13 3	—	
1200	Wheal Trevenna, t, c*	10 0 0	—	

MISCELLANEOUS.

Shares.	Mines.	Paid.	Last Pr.	Bus. done.
60000	Anglo-American Telegrh.*†	10 0 0	19⅜	
30000	Central American Assocl.*†	1 10 0	1½	1¼ 1¾
80000	Ebbw Vale Iron Co.*†	27 10 0	—	
4000	Hollybush Coll. and Coke*	5 0 0	—	
148525	London Gen. Omnibus*†	4 0 0	2⅛	

b, blende; *cl*, coal; *c*, copper; *g*, gold; *l*, lead; *s*, silver; *sl.*, slate; *s-l*, silver-lead; *t*, tin; *z*, zinc.

*** Companies marked thus * have been incorporated with Limited Liability; those marked † have been admitted on the Stock Exchange, those marked thus ‡ have paid Dividends.

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their office, 26, FLEET STREET, E.C., where all communications are requested to be addressed.—*February* 22, 1868.